A COLLECTION OF

VALUABLE RECEIPTS

LONDON 1819

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VALUABLE

RECEIPTS,

IN VARIOUS BRANCHES OF

DOMESTIC ECONOMY,

SELECTED FROM

THE WORKS OF BRITISH AND FOREIGN WRITERS OF UNQUESTIONABLE AUTHORITY AND EXPERIENCE.

BY HENRY PARNELL,
OF LINCOLN'S INN FIELDS.

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1819.

A COLLECTION

OF

Valuable Receipts.

To detect Dampness in a Bed.

Let your bed be first well warmed, and immediately as the warming-pan is taken out, introduce between the sheets, in an inverted direction, a clear glass goblet; after it has remained in that situation a few minutes, examine it; if found dry, and not tarnished with drops of wet, for there will often appear a slight cloud of steam, the bed is safe; but if drops of wet or damp adhere to the inside of the glass, it is a certain sign of a damp bed. Even wearing apparel, when on the person, will, in most parts of England, by the application of a warming-pan, stain glass with a slight steam, but not drops of wet. Or take off the sheets and sleep in the blankets.

Easy method of preserving Animal Food sweet for several days in the height of Summer.

Veal, mutton, beef, or venison, may be kept for nine or ten days perfectly sweet and good in the heat of summer, by lightly covering the same with bran, and hanging it in a high and windy room; therefore a cupboard full of small holes, or a wire safe, so as the wind may have a passage through, is recommended to be placed in such a room, to keep away the flies.

Useful method of preserving Bees, as lately adopted in America.

Instead of destroying whole swarms in their hives, to get the honey when the hives are full, they clear them out into a fresh hive, while they take the combs out of the old one; and they prevent their perishing in winter by putting a great quantity of honey into a very wide earthen vessel, covering its surface with paper, exactly fitted on, and pricked full of holes with a large pin; this being pressed by the weight of the bees keeps a fresh supply continually arising. Their most fatal destruction by severe cold they prevent, by taking as many large tubs as they have hives, and knocking out the heads, they set the other end in the ground, laying a bed of dry earth or chopped hay in it, of six inches deep; over this they place the head knocked out, and then make a small wooden trough for the passage of the bees; this is transfixed through a hole cut through each side of the tub, at such a height as to lay on the false bottom, on which is placed the covered dish of honey for the food of the bees, leaving a proper space over this, covered with strong matting; they then fill up the tub with more dry earth, or chopped hay, heaping it up in the form of a cone, to keep out the rain, and wreathing it over with straw on account of the warmth. This method is so secure, that out of a hundred tubs, a few winters since, when this experiment was tried, not one of them was known to fail. The quantity of honey this way obtained has been amazing, and besides, must every year increase, wherever the example is followed.

To make Artificial or Potatoe Bread.

Put a pound of potatoes in a net, into a skillet with cold water, and, lest the skin break and let in the water, hang it at a distance, so as not to boil, over the fire till they become soft; then skin, mash, and rub them so as to be well mixed with a pound of flour, a very large spoonful of salt, and two large spoonfuls of yeast; but less of the yeast is better. Then add a

little warm water, and knead it up as other dough; lay it a little while before the fire to ferment or rise, then bake it in a very hot oven. Bread made in this manner has been frequently tried, and found to be well-tasted, wholesome, and of good consistence.

Method for taking the Rankness and disagreeable Taste from Irish Salt Butter.

The quantity proposed to be made use of, either for toasts or melting, must be put into a bowl filled with boiling water, and when the butter is melted, skim it quite off; by this method it is so seperated from any gross particles, that it may require a small addition of salt, which may be put into the cold water that is made use of in melting butter for sauce; and though the butter is oiled by hot water, it becomes a fine cream in the boiling for sauce.

Method of making Stilton Cheese.

Take the night's cream, and put it to the morning's new milk, with the rennet; when the curd is come it is not to be broken, as is done with other cheeses, but take it out with a soil dish altogether, and place it on a sieve to drain gradually, and as it drains, keep gradually pressing it till it becomes firm and dry; then place it in a wooden hoop; afterwards to be kept dry on boards, turned frequently, with cloth-binders round it, which are to be tightened as occasion requires.

In some dairies, the cheeses, after being taken out of the wooden hoop, are bound tight round with a cloth, which cloth is changed every day until the cheese becomes firm enough to support itself; after the cloth is taken away, they are rubbed every day all over, for two or three months, with a brush; and if the weather is damp or moist, twice a day; and even before the cloth is taken off, the top and bottom are well rubbed every day.

N. B.—The dairy-maid must not be disheartened if she does not succeed perfectly in her first attempt.

Method of expeditiously Fattening Chickens.

Take for that purpose a quantity of rice, and grind or pound it into a fine flour; mix sufficient for present use with milk and a little coarse sugar; stir the whole well over the fire, till it makes a thick paste; and feed the chickens in the daytime only, by putting as much of it as they can eat, but no more, into the troughs belonging to their coops. It must be eaten while warm; and if they have also beer to drink, they will soon grow very fat. A mixture of oatmeal and treacle, combined till it crumbles, is said to form a food for chickens, of which they are so fond, and with which they thrive so rapidly, that at the end of two months they become as large as the generality of full grown fowls fed in the common way.

Method of Fattening Geese and Ducks.

Geese, the more quiet and undisturbed they are kept, the faster and better they fatten.

I shall begin with what are usually called green geese:—Let these young geese be put in a place that is almost dark, and be fed with some ground malt mixed up with milk, and they will very soon, and at very little expence be fit to kill; the method has often been tried, and the flesh has been found to eat very delicate.

I sometimes fat them in a still cheaper way, especially when milk is scarce: I mix up some barley meal pretty thick with water, which they constantly have by them to eat as they chuse; in another part of the shed, where they are kept in a pan with some boiled oats, and water for them to resort to when they are inclined to change their food. This variety is agreeable to them, and they thrive apace, being so fatted at less expence than in any other manner I know of.

The manner in which I manage my Michaelmas or stubble geese, is not very different from that above described. Immediately after harvest I turn them on the wheat eddishes, where they pick up flesh apace; but when I take them up to fatten, I feed

them with ground malt mixed up with water, and give them with it boiled oats, boiled malt, or boiled barley, and sometimes for change, even boiled wheat and water. Thus managed, they grow fatter and acquire a finer flavour than would at first be imagined, and greatly superior to those in the London markets.

I fatten my ducks in the same manner, only allowing them a larger pan to dabble in, which answers extremely well.

I keep a very considerable number of ducks for breeders, having near my house the convenience of several ponds, and I annually set in the spring a great number of duck eggs under hens; it is therefore natural that I should chuse such a breed as will lay me a large store of eggs, and I have always found such as have their bills turn up rather more than ordinary to answer this purpose best.

To Purify Water for Domestic and other purposes.

This method is extremely simple, and consists in placing horizontally in the midst of a common water butt, a false bottom, perforated with a great number of small holes. The butt being thus divided into two equal parts, the upper is filled with pieces of charcoal, which must be neither too large nor too small, thoroughly burned, light, and well washed. Immediately under the cock by which the water enters the butt, must be placed a small hollow cylinder, being merely to brake the force of the water, and prevent it from falling upon the charcoal with such violence as to detach from it any particles of dirt, and wash them through into the lower receptacle; it is of little consequence of what material it is made. M. Siauve thinks that this contrivance might be made subservient to the interests of agriculture as well as domestic economy; and that it would be highly advantageous to provide water thus filtered for the cattle, during the whole of the dog-days, and particularly when the ponds and streams are infected by the rotting of hemp and flax.

Remark.—A very good filtre may be made of charcoal, but it is comparatively expensive; and there is

a patent for the only way in which the filtre can be made to last. In the above receipt, if the charcoal is not in very fine powder, it will have little effect in purifying the water; if it be, the charcoal will very soon choke from the quantity of mud deposited in it by the water, and the frequent renewals of the charcoal, which would be necessary from the choking, would be found expensive. The contrivance could only be useful as a temporary means of ascertaining the power of the charcoal on the particular kind of water, with a view afterwards to procure a proper filtre.

To Preserve Apples.

Dry a glazed jar perfectly well, put a few pebbles in the bottom; fill the jar with apples, and cover it with a bit of wood made to fit exactly; and over that put a little fresh mortar. The pebbles attract the damp of the apples. The mortar draws the air from the jar, and leaves the apples free from its pressure, which together with the principle of putrefaction which the air contains, are the causes of decay. Apples kept thus have been found quite sound, fair, and juicy, in July.

To preserve Potatoes from the Frost.

If you have not a convenient store-place for them, dig a trench three or four feet deep, into which they are to be laid as they are taken up, and then covered with the earth taken out of the trench, raised up in the middle like the roof of a house, and covered with straw to carry off the rain. They will be thus preserved from the frost, and can be taken up as they are wanted.

Manner of preserving Eggs perfectly fresh, for Twelve Months.

Having provided small casks like oyster barrels, fill them with fresh laid eggs; then pour into each cask, the head of which is supposed to have been first taken out, as much cold thick lime-water as will fill

up all the void spaces between the eggs, and likewise completely cover them. The thicker the lime-water is the better, provided it will fill up all the interstices, and be liquid at the top of the cask; this done, lay on the head of the cask lightly. No farther care is necessary, than merely to prevent the lime from growing too hard, by adding occasionally a little common water on the surface, should it seem so disposed, and keeping the casks from heat and frost. The eggs when taken out for use, are to be washed from the adhering lime with a little cold water, when they will have both the appearance and qualities of fresh laid eggs, the lime preserving them from shrinking or putridity.

To prevent Lamps from being pernicious to Asthmatic Persons, or others, liable to Complaints of the Chest.

Let a sponge three or four inches in diameter, be moistened with pure water, and in that state be suspended by a string or wire, exactly over the flame of the lamp, at the distance of a few inches; this substance will absord all the smoke emitted during the evening or night; after which it should be rinsed in warm water, by which means it will be again rendered fit for use.

To prevent the Freezing of Water in Pipes, in the Winter Time.

By tying up the ball-cock during the frost, the freezing of pipes will often be prevented; in fact, it will always be prevented where the main pipe is higher than the cistern or other reservoir, and the pipe is laid in a regular inclination from one to the other, for then no water can remain in the pipe; or if the main is lower than the cistern, and the pipe regularly inclines, upon the supplies ceasing, the pipe will immediately exhaust itself into the main. Where water is in the pipes, if each cock is left a little dripping, this circulation of the water will frequently prevent the pipes from being frozen.

Proper method of making Toast and Water, and the advantages resulting therefrom.

Take a slice of fine and stale loaf-bread, cut very thin, (as thin as toast is ever cut) and let it be carefully toasted on both sides, until it be *completely browned all over*, but not blacked or burned in any way. Put this into a common deep stone or china jug, and pour over it from the tea-kettle as much clean boiling water as you wish to make into drink. Much depends on the water being actually in a boiling state. Cover the jug with a saucer or plate, and let the drink cool until it be quite cold; it is then fit to be used: the fresher it is made the better, and of course the more agreeable. The above will be found a pleasant, light, and highly diuretic drink. It is peculiarly grateful to the stomach, and excellent for carrying off the effects of any excess in drinking. It is also a most excellent drink at meals, and may be used in the summer time, if more agreeable to the drinker.

To prevent inconvenience from Perspiration of the Hands.

Ladies who work lace or embroidery, sometimes suffer inconvenience from the perspiration on their hands, which may be remedied by rubbing the hands frequently with a little dry wheaten bran.

Method of cleaning and polishing Rusty Steel.

After well oiling the rusty parts of the steel, let it remain two or three days in that state; then wipe it dry with clean rags, and polish with emery or pumice stone, on hard wood. Frequently however, a little unslacked lime finely powdered, will be sufficient after the oil is cleaned off. Where a very high degree of polish is requisite, it will be most effectually obtained by using a paste composed of finely levigated blood-stone and spirits of wine. Bright bars, however, are admirably cleaned in a few minutes, by using a small portion of fine corned emery, and afterwards finishing with flour of emery or rotten-stone,

all of which may be had at any ironmonger's. This last very simple method will perhaps render any other superfluous.

To clean Marble.

Take a bullock's gall, a gill of soap lees, half a gill of turpentine, and make it into a paste with pipe clay; then apply it to the marble, and let it dry a day or two; then rub it off, and if not clean, apply it a second or third time until it is clean.

Best method of cleaning fine Block-tin Dish Covers, Patent Pewter, &c.

Where the polish is gone off, let the articles be first rubbed over the outside with a little sweet oil on a piece of soft linen cloth; then clear it off with dry pure whitening, quite free from sand, on linen cloths, which will make them look as well as when new. The insides should be rubbed with rags moistened in wet whitening, but without a drop of oil. Always wiping these articles dry when brought from table, and keeping them free from steam or other damp, greatly facilitates the trouble of cleaning them.

Mixture for cleaning Stone Stairs, Hall Pavements, &c. &c.

Boil together half a pint each of size and stone blue water, with two table spoonfuls of whiting, and two cakes of pipemaker's clay, in about two quarts of water. Wash the stones over with a flannel slightly wetted in this mixture, and when dry, rub them with flannel and a brush. Some persons recommend beer, but water is much better for the purpose.

To clean Mahogany Furniture.

Three pennyworth of alkanet root, one pint of cold drawn linseed oil, two pennyworth of rose pink; put these into a pan and let them stand all night: then take some of this mixture, rub it over the tables or chairs, and let it remain one hour; then take a linen cloth and rub it well off, and it will leave a beautiful gloss on the furniture.

If the pinky shade occasioned by the alkanet root and pink is disagreeable, they may be omitted in part or entirely.

To preserve Lemon Juice during a long voyage.

Care must be taken to squeeze only sound fruit, as a tainted lemon will endanger the spoiling of the whole: the expressed juice must be depurated, by standing a few days, adding one ounce of cream of tartar to every quart of lemon juice; filter it pretty clear; then it is to be put into small bottles, none of them containing more than a pint of juice; in the neck of the bottle a little of the best oil of olives is to be poured, and the cork well sealed over.

Elder Wine.

Pick the elder berries when full ripe; put them into a stone jar, and set them in the oven, or a kettle of boiling water, till the jar is hot through; then take them out and strain them through a coarse cloth, wringing the berries, and put the juices into a clean kettle; to every quart of juice put a pound of fine Lisbon sugar; let it boil, and skim it well; when it is clear and fine pour it into a jar; when cold cover it close, and keep it till you make raisin wine; and to every gallon of wine put half a pint of elder syrup.

The Virtues of Sage.

This valuable herb was held in such high esteem among the ancients, that they have left us a Latin verse, which signifies,

"Why should a man die whilst he has Sage in his Garden?"

It is reckoned admirable as a cordial, and to sweeten and cleanse the blood. It is good in nervous cases, and is given in fevers with a view to promote perspiration. With the addition of a little lemon juice it is very grateful and cooling: some choose to take it dry, alleging that the surface of the leaves of green sage abound with animalculæ, which are very

visible through a microscope, and so there are in many articles of common food; but we may be assured, even if this is the case, that as they are nourished with the sage, they are of no harm, and at all events a little hot water will destroy them.

To destroy Bugs.

The risk of bugs in a large city is inevitable; the clothes-boxes of servants, the going to a public place or in a public carriage, or the insect being blown against the apparel while walking the streets, may introduce it into the house. But to cleanly people, whose beds are examined, and the joints oiled with pure sweet oil three or four times a year, they cannot become troublesome; except what no person can be secure against, they should succeed in the occupation of a house, a filthy, though perhaps a very fine predecessor, who has permitted the animal to entrench itself in the walls and the ceiling.

In such a situation the chimney and the windows were pasted up air-tight, and after a mixture of powder of brimstone and saltpetre (as used by the makers of vitriolic acid) was set fire to with proper precaution, in an earthen pan and sand, the doors were shut, and the joints pasted up. The remedy, and in such a case it was thought proper to fumigate all the rooms, was effectual. Coloured hangings, &c. which the gas might hurt, were removed to the bedding, and to wood it does no injury.

There is however some difficulty in forming such a quantity of vitriolic acid gas, which is heavy and not very expansible, as completely to penetrate the crevices of the room in which the insects harbour. As the oxymuriatic gas is at least as strong a poison to animals as the vitriolic, there is no reason to anticipate that it is not equally so to the bug, and it is much more easily applied and more expansible. It is likely to answer, but there has been no similar opportunity of trying it. Coloured hangings should be removed, as though that gas will not affect completely oxidated metallic dyes, it will bleach or whiten the vegetable colours. After some hours' fumigation, the

doors and windows should be thrown open, without breathing, or as little as possible the air of the rooms. The remaining gas will then be dissipated more quickly than the vitriolic.

Plate Powder.

In most of the articles sold as plate powders under a variety of names, there is an injurious mixture of quicksilver, which is said sometimes so far to penetrate and render silver brittle, that it will even break with a fall. Whitening, properly purified from sand, applied wet, and rubbed till dry, is one of the easiest, safest, and certainly the cheapest of all plate powders; jewellers and silversmiths, for small articles, seldom use any thing else. If, however, the plate be boiled a little in water, with an ounce of calcined hartshorn in powder to about three pints of water, then drained over the vessel in which it was boiled, and afterwards dryed by the fire, while some soft linen rags are boiled in the liquid till they have wholly imbibed it; these rags will, when dry, not only assist to clean the plate, which must afterwards be rubbed bright with leather, but also serve admirably for cleaning brass locks, finger plates, &c.

Essence of Soap for Shaving or Washing Hands.

Take a pound and a half of fine white soap in thin slices, and add thereto two ounces of salt of tartar; mix them well together, and put this mixture into a quart of spirits of wine, in a bottle which will hold double the quantity of the ingredients; tie a bladder over the mouth of the bottle, and prick a pin through the bladder; set it to digest in a gentle heat, and shake the contents from time to time, taking care to take out the pin at such times to allow passage for the air from within; when the soap is dissolved, filter the liquor through paper, to free it from impurities; then scent it with a little bergamot or essence of lemon. It will have the appearance of fine oil, and a small quantity will lather with water like soap, and is much superior in use for washing or shaving.

To prevent Steel or Iron from Rust.

Take one pound of hog's lard free from salt, one ounce of camphor, two drachms of black lead powder, and two drachms of dragon's blood in fine powder; melt the same on a slow fire until it is dissolved, and let it cool for use.

Swedish method for preserving from Rust Iron work exposed to Air.

They take such a quantity of pitch and tar as they think they have occasion for, and mix up with it such a quantity of the best sort of soot as not to make it too thick for use; with this composition they paint or besmear all the parts of the iron work, for which purpose they make use of short hard brushes, because they must press pretty strongly upon the iron in order to give it a sufficient quantity, and they always choose to perform this operation in the spring time of the year, because the moderate heat of the season hardens the pitch so much, that it is never melted by the succeeding heats of the summer, but on the contrary, acquires such a gloss as to look like varnish This has been found by experience, to preserve iron from rust much better than any sort of paint, and is as cheap as any that can be made use of.

To preserve Turnips from Frost.

The best way is to stack them up in straw in the following manner:—One load of any sort of dry straw is sufficient for an acre of fifty tons weight. Pull up the turnips, top and tail them, then throw them in a sort of windrow, and let them lie a few days to dry.

First, lay a layer of straw next the ground, and upon it a layer of turnips about half a yard thick; then another layer of straw; so go on alternately with a layer of straw and a layer of turnips; every layer grows narrower, till it comes to a point at the top, like a sugar loaf. The last layer must be straw, which serves to keep all dry. You must observe always, when you have laid a layer of turnips, to stroke or lap over the ends of the under layer of straw, in or-

der to keep them close or from tumbling out. The heap should be as large as a hay-cock; the tops may be given to sheep or cattle as they are cut off.

To preserve Corn in Sacks.

Provide a reed cane or other hollow stick, made so by gluing together two grooved sticks; let it be about three feet nine inches long; and that it may be the easier thrust down to the bottom of the corn in the sack, its end to be made to taper to a point, by a wooden plug that is fixed in, and stops the orifice. About one hundred and fifty small holes, of one eighth of an inch in diameter, are to be bored on all sides of the stick, from its bottom for about two feet ten inches of its length; but no nearer to the surface of the corn, lest too great a proportion of the air should escape there. By winding a packthread in a spiral form round the stick, the boring of the holes may be the better regulated, so as to have them about half an inch distant towards the bottom, but gradually at wider distances, so as to be an inch asunder at the upper part, by which means the lower part of the corn will have its due proportion of fresh air. To the top of the stick let there be fixed a leathern pipe ten inches long; which pipe is to be distended by two yards of spiral wire, coiled up within it. At the upper part of the pipe is fixed a taper wooden fasset, into which the nose of a common household bellows is to be put, in order to ventilate the corn.

If corn, when first put into sacks, be thus aired, every other or third day, for ten or fifteen minutes, its damp sweats which would hurt it, will in a few weeks be carried off to such a degree, that it will afterwards keep sweet with very little airing, as has been found by experience.

By the same means other kinds of seeds, as well as corn, may be kept sweet either in sacks or small bins.

Proper Soil for the culture of Turnips.

Sandy loams, in good heart, are most favourable to their growth, though they will thrive well on strong

loams, if they are not wet; but on clayey, thin, or wet soils, they are not worth cultivating; for though a good crop may be raised on such ground, when well prepared and dunged, more damage is done by taking off the turnips in winter, in poaching the soil, than the value of the crop will repay.

Great utility of sowing Buck Wheat.

In light lands buck wheat may be raised to great advantage, as a lucrative crop. When green, it is a fine feed for milch kine; and when ploughed, is a fine preparation for the land. It fattens pigs with great economy, and passed through the mill, is with carrot, a capital feed for work horses. The seed is excellent food for poultry, and when ground makes good bread.

To prevent the Smut in Wheat.

The means to prevent smut are simple; and no other than immersing the seed in pure water, and repeatedly scouring it therein, just before it is sown or dibbled in. Whether well, spring, or river water be used, is indifferent: but repeated stirring and change of water is essential to remove the possible particles of infection that may have imperceptibly adhered to the seed; thus purified, the subsequent crop will be perfect in itself, and seed successively so likewise, if there be no adjacent fields from whence this contamination may be wafted.

The addition of any alkaline or earthy salt, by increasing the specific gravity of the water, is of advantage in floating off the unsound grains, and after the seed is washed, it should be dried immediately, by rubbing it with newly slacked lime.

To prevent Hay-stacks from taking Fire.

When there is any reason to fear that the hay which is intended to be housed or stacked is not sufficiently dry, it is only necessary to scatter a few handfuls of common salt (muriate of soda) between each layer. It would be very ill judged to regret this trifling expence; for the salt by absorbing the humidity of the

hay, not only prevents the fermentation and consequent inflammation of it, but it also adds a taste to this forage, which stimulates the appetites of cattle, assists their digestion, and preserves them from many diseases.

Remark.—The cattle like a little salt, but it has little effect in preventing inflammation.

Utility of Pigeon's Dung as a Manure.

Pigeon's dung will improve moist meadows very much, by extirpating bad kinds of grasses, bringing white clover in its stead, and augmenting the crop.

To make a Quickset Hedge or Fence.

Quick fences often become open in many places at bottom, notwithstanding the utmost attention, and more especially if neglected. The barberry shrub on the contrary will make an impenetrable fence, and always close at the bottom, because it puts up numerous suckers from the roots, which fill every vacancy. It may as easily be raised from the berries as quick or hawthorn, and it grows faster. The suckers also will strike root easily, especially if planted early. These shrubs may be had at most nurseries. The barberry, however, can never make so strong a fence as a good well trained hawthorn hedge. But there are situations where it may be preferable; on the top of a high bank (for it is comparatively a light shrub) as in the Devonshire hedges, for mixing with other plants in a hedge, or stopping gaps in an old hedge. For the last purpose the common sweet briar (the seedlings of which may be raised in almost any situation for 10s. a thousand) is also excellent.

Easy method of obtaining Water in almost any Situation.

The ground must be perforated by a borer. In the perforation is placed a wooden pipe, which is driven down with a mallet, after which the boring is continued, that the pipe may be driven still farther. In proportion as the cavity of the borer becomes

loaded, it is drawn up and emptied; and in time, by the addition of new portions of wooden pipe, the boring is carried to any depth, and water is generally obtained.

The use of Tar Water in expanding the Lungs of Public Speakers, &c.

It has been found by the experience of many, that drinking tar water very much deterges and opens the lungs, and thereby gives a very sensibly greater ease in speaking. A quart of tar is to be stirred six minutes in a gallon of water; but if there be somewhat less tar it may do as well, especially at first, to try how it sits on the stomach. Take about one fourth of a pint, at four several times, at a due distance from meals. Begin taking it in the spring for about fourteen days, and continue it for a greater length of time, as occasion may require.

To Fumigate Foul Rooms.

To one table-spoonful of common salt and a little powdered manganese in a glass cup, add at four or five different times a quarter of a wine glass of strong vitriolic acid. At every addition of the acid, the vapour will come in contact with the malignant miasmata, and destroy them.

To harden Quills.

In order to harden a quill that is soft, thrust the barrel into hot ashes stirring it till it is soft; and then taking it out press it almost flat upon your knee with the back of a penknife, and afterwards reduce it to a roundnes with your fingers. Another method to harden quills is by setting water and alum over the fire, and while it is boiling put in a handful of quills, the barrels only, for a minute, and then lay them by.

To repair Roads near to Coal Mines.

The roads to and from coal mines are usually in bad condition from the heavy loads passing in carts over them. The late Duke of Bridgewater, to repair them, adopted with great success the following plan,

at Worsley in Lancashire. The stones, clay, and rubbish, first raised from the shaft, were laid in a large heap above ground; then such inferior coal, pyrites, or shale, as was unfit for sale, and usually thrown away, was laid in another near it; a third heap was raised from a mixture made by laying repeated layers from the above two heaps, stratum, super stratum, and this heap, set on fire in such a direction that the wind would assist the fire to penetrate it throughout. The mass when burnt formed a compound of half vitrified substances, and abundantly supplied good materials for his drag-paths along the canal, and enabled him to sell the surplus advantageously for the repair of the turnpike roads in that neighbourhood.

Method of extracting Starch from Horse Chesnuts.

First take off the outward green prickly husks, and then either by hand, with a knife, or other tool, or else with a mill adapted for that purpose, very carefully pare off the brown rind, being particular not to leave the smallest speck, and to entirely eradicate the sprout or growth. Next take the nuts and rasp, grate, or grind them fine into water, either by hand or by a mill adapted for that purpose. The pulp, which is thereby formed in this water, must be washed as clean as possible through a coarse horse-hair sieve, then again through a finer sieve, and again through a still finer, constantly adding clean water to prevent any starch adhering to the pulp. The last process is to put it with a large quantity of water (about four gallons to a pound of starch) through a fine gauze, muslin, or lawn, so as entirely to clean it of all bran or other impurities; as soon as it settles pour off the water; then mix it up with clean water, repeating this operation till it no longer imparts any green, yellow, or other colour to the water; then drain it off till nearly dry, and set it to bake either in the usual mode of baking starch, or else spread out before a brisk fire, being very attentive to stir it frequently to prevent its horning, that is to say, turning to a paste or

jelly, which on being dried turns hard like horn. The whole process should be conducted as quickly as possible.

Method of making the best sort of Bird Lime, and manner of using it.

Take at midsummer the bark of holly, and peel from the tree so much of it as will fill a moderately large vessel; then put to it running water, and set it over the fire and boil it till the grey and white bark rise from the green, which will take up sixteen hours; then separate the barks after the water is well drained away; then take all the green bark and lay it on the ground in a close place and moist floor, and cover it over with green weeds, as hemlocks, docks, thistles and the like; thus let it lie ten or twelve days, in which time it will rot, and turn to a filthy slimy matter; then put it into a mortar, and beat it till it comes universally thick and tough, without the discerning of any part of the bark or substance; then take it out of the mortar, and carry it to a running stream, and there wash it well, not leaving any foulness about it; then put it up in a very close earthen pot, and let it stand and purge for divers days together, scumming it as often as any foulness arises for four or five days; when you perceive no more scum, then take it out of that pot and put it in another clean earthen vessel, cover it close, and keep it for use.

When you want to use your lime, take what quantity you think fit, and put it into a pipkin, adding a third part of goose or capon's grease finely clarified, and set them over a gentle fire; let them melt together, and stir them continually till they are well incorporated; then take it from the fire, and stir it till it be cold.

When your lime is cold, take your rods and warm them a little over the fire; then take your lime and wind it about the tops of your rods, then draw your rods asunder one from the other, and close them again, continually plying and working them together, till by smearing one upon another, you have equally

bestowed upon each rod a sufficient proportion of the lime.

If you lime any strings, do it when the lime is very hot and at the thinnest, besmearing the strings on all sides, by folding them together and unfolding them again.

If you lime straws, it must be done likewise when the lime is very hot, doing a great quantity together, as many as you can well grasp in your hand, tossing them and working them before the fire till they are all besmeared, every straw having its due proportion of lime. Having so done, put them in cases of leather till you have occasion to use them.

To prevent the freezing of your lime either on twigs, bushes or straws, you must add a quarter as much of the oil of petroleum as of capon's grease, mixing them well together, and then work it on your rods, &c.; and so it will ever keep supple, tough, and gentle, and will not be prejudiced should the weather freeze ever so hard.

Experienced method of Catching Larks.

The common way of taking larks, of which so many are used at our tables, is in the night, with those nets which are called trammels. These are usually made thirty six yards in length, and about six yards over, with six ribs of packthread, which at the ends are put upon two poles of about sixteen feet long, and made lesser at each end. These are to be drawn over the ground by two men, and every five or six steps the net is made to touch the ground, otherwise it will pass over the birds without touching them, and they will escape. When they are felt to fly up against the net, it is clapped down, and then all are safe that are under it. The darkest nights are properest for this sport; and the net will not only take larks, but all other birds that roost on the ground, among which are woodcocks, snipes, partridges, quails, fieldfares, and several others.

For taking Grease out of the Leaves of Books.

Fold up in two small bags made of fine open mus-

lin, some ashes of burnt bones finely powdered, or of calcined hartshorn, which is always ready prepared at the shops of the druggists; lay the bags of muslin containing the powder, one on each side of the greasy leaf; and having heated a pair of fire tongs, or hair dresser's pinching tongs, of a moderate warmth, press with them the two bags against the greasy spot, and hold them some time in that situation. Repeat the process if necessary.

When the irons cannot be conveniently used, the powder may be heated over the fire in a clean earthen vessel, and whilst hot applied, without any muslins, on each side of the grease spot, and a weight laid on it to assist its effect.

To Marble Books or Paper.

Marbling of books or paper is performed thus:—Dissolve four ounces of gum Arabic in two quarts of fair water; then provide several colours mixed with water in pots or shells, and with pencils peculiar to each colour; sprinkle them by way of intermixture upon the gum water, which must be put into a trough or some broad vessel; then with a stick, curl them or draw them out in streaks to as much variety as may be done. Having done this, hold your book or books close together, and only dip the edges in on the top of the water and colours very lightly; which done, take them off, and the plain impression of the colours in mixture will be upon the leaves; doing as well the ends as the front of the book in the like manner, and afterwards glazing the colours.

Method of extracting the Virtue of Hops in Brewing.

The usual method is to put in hops without any preparation, into the strong beer or ale wort; the consequence is, the richer and better the wort is, the less it will partake of the essence of the hops. The rich fat wort sheathes up the pores of the hop, and as it were, embalms the leaves, so that the beer or ale wort can extract scarcely any part of the necessary quality of the hop; but when it is put into the small

beer wort, a fluid of a more thin nature, there the pores are unsheathed, and the small beer is rendered too bitter; therefore the hops before they are put into the strong drink, should be previously soaked in a pail of hot water.

To confirm the truth of this observation, take a quarter of an ounce of the best green tea, and instead of pouring on it simple boiling water, let the water have the same quantity of sugar boiled in it that would be necessary to sweeten so much tea when made, and you will find that the sweetness of the water will prevent its extracting the grateful bitter of the tea.

Cheap and easy method of Brewing.

One bushel of malt and three quarters of a pound of hops will, on an average, brew twenty gallons of good beer.

For this quantity of malt boil twenty four gallons of water; and having dashed it in the copper with cold water to stop the boiling, steep the malt (properly covered up) for three hours; then tie up the hops in a hair cloth, and boil malt, hops, and wort altogether for three quarters of an hour, which will reduce it to about twenty gallons. Strain it off, and set it to work when lukewarm.

In large brewings this process perhaps would not answer; but in small ones, where the waste is not so great, and where the malt can be boiled, the essence is sure to be extracted.

To make excellent and wholesome Table Beer.

To eight quarts of boiling water put a pound of treacle, a quarter of an ounce of ginger, and two bay leaves; let this boil for a quarter of an hour, then cool, and work it with yeast, the same as other beer.

To make Ginger Beer.

To every gallon of spring water add one ounce of sliced white ginger, one pound of common loaf sugar, and two ounces of lemon juice, or three large table

spoonfuls; boil it near an hour and take off the scum; then run it through a hair sieve into a tub, and when cool (viz 70°) add yeast in proportion of half a pint to nine gallons; keep it in a temperate situation two days, during which it may be stirred six or eight times; then put it into a cask, which must be kept full, and the yeast taken off at the bung hole with a spoon. In a fortnight add half a pint of fining (isinglass picked and steeped in beer) to nine gallons, which will, if it has been properly fermented, clear it by assent. The cask must be kept full, and the rising particles taken off at the bung hole. When fine (which may be expected in twenty-four hours) bottle it, cork it well, and in summer it will be ripe and fit to drink in a fortnight.

Easy Method of preserving Yeast.

Yeast may be preserved for a considerable time by coating a board with a whiting brush, allowing the coat to dry; then putting on another, which is in like manner to dry; and so a third, and any number of successive coatings, which when perfectly dry, will keep vigorous for a long time. Another method is to whisk the yeast until it becomes thin, and then to lay it upon a dry platter or dish repeatedly, with a soft brush as above mentioned. The top is then to be turned downwards to keep out the dust, but not the air which is to dry it. By this method it may be continued till it be two or three inches thick, when it may be preserved in dry tin cannisters for a long time good. When used for baking, a piece is to be cut off, and laid in warm water to diffuse or dissolve, when it will be fit for use.

To prevent Beer from growing Flat.

In a cask containing eighteen gallons of beer becoming vapid, put a pint of ground malt, suspended in a bag, and close the bung perfectly: the beer will be improved during the whole time of drawing it for use.

To cure Damp Walls.

Boil two quarts of tar with two ounces of kitchen

grease for a quarter of an hour in an iron pot. Add some of this tar to a mixture of slacked lime and powdered glass, which have passed through a flour sieve, and been completely dried over the fire in an iron pot, in the proportion of two parts of lime and one of glass, till the mixture becomes of the consistence of thin plaister. The cement must be used immediately after being mixed, and therefore it is proper not to mix more of it than will coat one square foot of wall, since it quickly becomes too hard for use; and care must be taken to prevent any moisture from mixing with the cement. For a wall merely damp, a coating one-eighth of an inch thick is sufficient; but if the wall is wet, there must be a second coat. Plaster made of lime, hair, and plaster of Paris, may afterwards be laid on as a cement. The cement above described will unite the parts of Portland stone or marble, so as to make them as durable as they were prior to the fracture.

To cure Smoky Chimnies.

Put on the top of the chimney a box, in each of whose sides is a door hanging on hinges, and kept open by a thin iron rod running from one to the other, and fastened by a ring in each end to a staple. When there is no wind these doors are at rest, and each forms an angle of 45°, which is decreased on the windward side in proportion to the force of the wind, and increased in the same ratio on the leeward side. if the wind be very strong, the door opposed to the wind becomes close, while the opposite one is opened as wide as it can be.—If the wind strikes the corner of the box, it shuts two doors, and opens their opposites. This scheme has been tried with success in a chimney which always filled the room with smoke; but which, since adopted, has never smoked the room at all. The expence is trifling, and the apparatus simple.

Scotch Kale, excellent Food for Cattle.

Scotch kale planted out in June in good land, will grow very large before winter, and would give an

abundant supply for cattle where no other juicy food is to be had. As it grows upwards, it may be planted close, and a vast deal will stand upon an acre.

To prevent Cows from contracting Bad Habits while Milking.

Cows should always be treated with great gentleness, and soothed by mild usage, especially when young and ticklish, or when the paps are tender; in which case the udder ought to be fomented with warm water before milking, and touched with the greatest gentleness, otherwise the cow will be in danger of contracting bad habits, becoming stubborn and unruly, and retaining her milk ever after. A cow never lets down her milk pleasantly to the person she dreads or dislikes. The udder and paps should always be washed with clean water before milking; but care should be taken that none of that water be admitted into the milking pail.

To improve the Wool of Sheep by Smearing.

Immediately after the sheep are shorn, soak the roots of the wool that remain, all over with oil, or butter and brimstone, and three or four days afterwards wash them with salt and water: the wool of next season will not only be much finer, but the quantity will be in greater abundance. It may be depended upon, that the sheep will not be troubled with the scab or vermin that year. Salt water is a safe and effectual remedy against maggots.

Cure of the Rot in Sheep.

Take a quantity of rue leaves, bruise them well, express the juice, and add an equal weight of salt; when any of the sheep are in great danger of being rotten, give them a table-spoonful of this once a week, and if they are not so bad, once in ten or twelve days. This will be found an excellent preservative, and in fact should always be given to sheep newly brought in, as it may preserve them in health, and can do them no harm, let them be ever so well.

Easy method of cleaning Boots and Shoes in the Winter time, so as to prevent soiling the Person, the Clothes, or the House.

When the boots or shoes are covered with dirt, take them off, and with the back of a case-knife, or a piece of wood cut thin at the edges like a stationer's paper knife, scrape the dirt off with the same as clean as possible, which will be very easily done while the boots and shoes are wet. Then with a small piece of wet sponge or flannel, wipe off the remaining dirt which the pressure of the knife cannot effect. Then place them in a dry room, or at a convenient distance from the fire, for a few hours, and they will take the blacking remarkably well, and bear as fine a polish as they did before wetting. If proper attention is paid to this process, the fingers will scarcely be soiled, and much trouble will be saved by the extra brushing required when the dirt is suffered to dry on.

To clean Boot Tops, or any Tanned Leather.

Boil one quart of milk, let it stand till cold; then take one ounce of oil of vitriol, one ounce of spirits of salts; shake them well together and add one ounce of red lavender. You may put half a pint of vinegar with the white of an egg beat to froth.

To prevent Gentlemen's Hats from being Spotted after a Shower of Rain.

If your hat is wet from rain or any other cause, shake it out as much as possible, then with a clean linen cloth or handkerchief wipe the hat very carefully as well as you can, observing that in so doing you keep the beaver flat and smooth, in the same direction as it was first placed; then with your hands fix it in the original shape, and hang it at a distance from the fire to dry. A few hours after, or the next morning, lay the hat on a table, and brush it round and round several times with a soft brush in the proper direction, and you will find your hat not in the least injured by the rain.

If the gloss is not quite so high as you wish,

take a flat iron moderately heated, and pass the same two or three times gently over the hat; brush it afterwards, and it will be nearly as handsome as when first sent home from the shop.

To stop the rapidity of Flames when the Female Dress happens accidentally to take Fire.

If a woollen cloth was constantly kept in nurseries and sitting rooms, especially when there are fires, laid loose upon the table, or other piece of furniture, this being always at hand, might be easily resorted to in case of accident, and being wrapt tight round the flames, or strongly pressed against them, would, by excluding the air, in many instances, soon extinguish the fire. A green baize cloth being very pliable, and likewise a neat cover to furniture, is recommended for this purpose; and if such were known in the family by the name of the *Stifling Cloth*, it probably would as readily be used when there was occasion for it, as fire engines and buckets are now. Care must be taken to procure baize of a close texture. Where the convenience of baize cloth cannot be easily procured, as in cottages, &c. a cloth cloak, riding-coat, or blanket, will answer much the same purpose. A man's coat will always be useful, and the first man that arrives ought to apply it.

Rules for collecting Curiosities on Sea Voyages.

Set apart a small cask of spirits, into which put every uncommon sea production you may meet with during the voyage, and wrap every article separate in a rag, or a little oakum.

Method of making excellent Butter from the Milk of Cows fed upon Turnips.

Let the bowls, either lead or wood, be kept constantly clean, and well scalded with boiling water, before using. When the milk is brought into the dairy, to every eight quarts mix one quart of boiling water; then put up the milk into the bowls to stand for cream. By keeping strictly to this method, you

will have during the winter, constantly sweet and well-tasted butter from the milk of cows fed upon turnips.

To judge of the quality of Wheat Flour.

As the state of wheat is ascertained by the quantity and quality of the glutinous matter it contains, the following method is made use of for extracting that matter from it.

Take four ounces of the flour of wheat separated from the bran; let it be mixed with water so as to form a thick paste, which must be thoroughly kneaded for a quarter of an hour. The paste is afterwards to be well washed, continually kneading it with the hands under the water, and changing the water from time to time. This washing and kneading are to be continued until the water no longer becomes white by the operation; the glutinous matter, which is of a whitish grey colour, then remains in the hands. If the wheat was sound the matter is glutinous and elastic, if the wheat was heated the matter will be brittle, if the wheat was in a state of fermentation no glutinous matter will be obtained from it.

To discover if Bread is adulterated with Alum.

Make a solution of lime in aquafortis, and put a little of this solution into water, in which you have steeped the bread suspected to contain alum. If such should be the case, the acid which was combined with the alum, will form a precipitate or chalky concretion at the bottom of the vessel.

To prevent Children from eating their Food too quickly.

Children when very young, get into the habit of eating their food too quickly, particularly fruit, and other substances of which they are fond. To prevent their acquiring this habit, amusing devices might be employed, as cutting an apple, a pear, a piece of cake, or any other article of the same sort into a number of pieces, arranging them in lines like an

army, with one as an officer in the centre, and telling them the whole army must be devoured *piece by piece*, and in a regular manner! This interests little children so much, that they soon prefer it to a more speedy mode of consumption.

The danger of Children eating Gilt Gingerbread, or any Article covered with such a Composition.

There are frequently sold eatable things, as images of sugar, &c. having on them what people imagine to be gold leaf, but which is in reality leaves of copper, beat out in imitation of it, which is so dangerous a poison as to demand the interference of government to prevent the sale of such articles; irreparable mischief having been occasioned without suspicion of the cause.

To Fatten Poultry.

Poultry should be fattened in coops, and kept very clean. They should be furnished with gravel, but with no water. Their only food barley-meal, mixed so thin with water as to serve them for drink. Their thirst makes them eat more than they would, in order to extract the water that is among the food. This should not be put in troughs, but laid upon a board, which should be clean washed every time fresh food is put upon it. It is foul and heated water which is the sole cause of the pip.

Important uses of the Leaves of the Vine.

From experiments made by Sir James Hall, it has been found that the leaves of the vine dried in the shade, make an excellent and extremely wholesome tea, though differing in taste and flavour from that commonly used; besides also being admirably calculated for making vinegar. The prunings of the vine on being bruised and put into a vat or mashing tub, and boiling water poured on them in the same way as is done with malt, will produce a liquor of a fine vinous quality; which being fermented, forms a substitute for beer; and which on being distilled, produces a good spirit of the nature of brandy.

Paste or Food for Singing Birds, superior to the German Paste in common Use.

Well mix or knead together three pounds of split peas ground or beat to flour, one pound and a half each of fine crumbs of bread and coarse sugar, the fresh yolks of six raw eggs, and six ounces of unsalted butter. Put about a third part of the mixture at a time in a frying pan over a gentle fire, and continually stir it till it be a little browned, but by no means burnt. When the other two parts are thus done, and all are become cold, add to the entire quantity six ounces of maw seed, with six pounds of good bruised hemp seeds separated from the husks. Mix the whole well together, and it will be found an excellent food for thrushes, red robins, larks, linnets, canary birds, finches of the different sorts, and most other singing birds, admirably preserving them in song and feather.

To preserve Lemon Juice during a Long Voyage.

Care must be taken to squeeze only sound fruit, as a tainted lemon will endanger the spoiling of the whole: the expressed juice must be depurated, by standing a few days, adding one ounce of cream of tartar to every quart of lemon juice; filter it pretty clear, and then put it into small bottles, none of them containing more than a pint of juice. In the neck of the bottle a little of the best oil of olives is to be poured, and the cork well sealed over.

To keep Oranges and Lemons.

Take small sand and make it very dry; after it is cold put a quantity of it into a clean vessel; then take your oranges and set a laying of them in the same stalk-end downwards, so that they do not touch each other, and strew in some of the sand, as much as will cover them two inches deep; then set your vessel in a cold place, and you will find your fruit in high preservation at the end of several months.

To make excellent Punch.

One tea-spoonful of Coxwell's acid salt of lemons,

a quarter of a pound of sugar, a quart of water nearly boiling, half a pint of rum, and a quarter of a pint of brandy; a little lemon peel may be added, or in place thereof, a few drops of the essence of lemon.

To Cure the Disease in Apple Trees.

Brush off the white down, clear off the red stain underneath it, and anoint the places infected with a liquid mixture of train oil and Scotch snuff.

To cure the Canker in Trees.

Cut them off to the quick, and apply a piece of sound bark from any other tree, and bind it on with a flannel roller. Cut off the canker, and a new shoot will grow strong, but in a year or two you will find it cankered.

Method of rendering Assistance to Persons in Danger of Drowning.

This desirable object appears attainable by the proper use of a man's hat and pocket handkerchief, (which being all the apparatus necessary,) is to be used thus:—Spread the handkerchief on the ground, and place a hat with the brim downwards on the middle of the handkerchief; and then tie the handkerchief round the hat as you would tie up a bundle, keeping the knots as near the centre of the crown as may be. Now by seizing the knots in one hand, and keeping the opening of the hat upwards, a person, without knowing how to swim, may fearlessly plunge into the water with what may be necessary to save the life of a fellow creature.

If a person should fall out of a boat, or the boat upset by going foul of a cable, &c. or should he fall off the quays, or indeed fall into any water from which he could not extricate himself, but must wait some little time for assistance, had he presence of mind enough to whip off his hat, and hold it by the brim, placing his finger within side the crown, and hold it so, top (downwards) he would be able by this method to keep his mouth well above water till assistance should reach him. It often happens that danger is descried long before we are involved in the peril,

and time enough to prepare the above method; and a courageous person would, in seven instances out of ten, apply to them with success; and travellers, in fording rivers at unknown fords, or where shallows are deceitful, might make use of these methods with advantage.

Method of Recovering persons Apparently Drowned, as recommended by the Humane Society.

Let those who first discover an unfortunate object in this situation remove it to some house near, place it by the fire, and begin by rubbing it with salt, volatiles, &c. and warm flannels, the head a little elevated; never attempting giving any thing by the mouth till signs of recovery strongly appear, and let the person be kept from a crowd of people around him. The idea that the stomach is full of water, and thus obviates recovery, is very erroneous and prejudicial, as it is now fully and clearly established, that the respiration being impeded is the sole cause of the suspension of life; and which being restored, the vital functions soon recover their tone: and men are frequently lost from the absurd custom of rolling on casks, lifting the feet over the shoulders, and the head falling on the ground.

Method to escape from Fire.

The following simple machine ought always be kept in an upper apartment. It is nothing more than a shilling or eighteen-penny rope, one end of which should always be made fast to something in the chamber, and at the other end should be a noose to let down children or infirm persons in case of fire. Along the rope there should be several knots, to serve as resting places for the hands and feet of the person who drops down by it. No family occupying high houses should ever be without a contrivance of this kind.

To Extinguish Fires Speedily.

Much mischief arises from want of a little presence of mind on these alarming occasions: a small quan-

tity of water well and immediately applied, will frequently obviate great danger. The moment an alarm of fire is given, wet some blankets well in a bucket of water, and spread them upon the floor of the room where the fire is, and afterwards beat out the other flames with a blanket thus wet: two or three buckets of water thus used early, will answer better than hundreds applied at a later period. Linen thus wet will be useful, but will not answer so well as woollen.

To extricate Horses from Fire.

If the harness be thrown over a draught, or the saddle placed on the back of a saddle horse, they may be led out of the stable as easily as on common occasions. Should there be time to substitute the bridle for the halter, the difficulty towards saving them will be still further diminished.

To stop the Progress of Fire on board of Ships.

From the great confusion occasioned by the alarm of fire on board a ship, with the dificulty often of ascertaining the precise spot where it is, it appears almost impossible to devise any means to prevent the progress of such an accident when once it has got head.

The only means that seems to promise success is, to convey water to any part of the ship according to the following method:—To place strong pipes through the decks, close to the sides of the vessel; those going to the hold must be cased, to prevent their being damaged by moving stores between the decks. These may be so distributed that every part between the decks may be within the reach of a stream of water issuing from them. The magazine and place where spirits and inflammable stores are kept, ought to have the greatest number of pipes about them, to prevent the fire reaching those parts.

Streams of water to the part on fire may be directed by a lever fixed on the top of the pipe, the end of which corresponding with the aperture below, the same vertical plane will pass through the lever and the stream.

Small engines, such as those used for watering gardens, will be sufficient for the purpose. Two men only will be required for the service of each pipe; one to supply it, and the other to direct the stream.

Improved method of making Cork Floats for Fishing

Take a cork, firm and free from flaws, and with a small red hot iron, bore a hole lengthways through the centre; with a sharp knife cut it across the grain about two-thirds of the length, tapering to the end where the hole is bored, and the remaining third rounded with it, (which is the top of the float) in the shape of an egg, the lower end tapering more gradually, resembling in shape the small peg tops children play with.

To prevent Fishing Lines from Rotting.

Never wind your lines on your reel wet; at least when you get home wrap them round the back of a chair, and let them be thoroughly dried, otherwise they will soon rot, and cannot be depended on; with this care they will last a considerable time.

To Intoxicate and take Fish.

Make a paste in the following manner:—Take cocculus indicus, cummin seeds, fenugreek seeds, and coriander seeds, equal parts: reduce them to powder, and make them into a paste with rice flour and water; reduce this paste into small balls of the size of peas, and throw it into such ponds or rivers where there are fish, which after eating thereof, will rise to the surface of the water almost motionless, and will allow themselves to be taken out by the hand.

To Bronze Plaister Figures.

Lay the figure over with isinglass size till it holds out, or without any part of its surface becoming dry or spotted; then with a brush, such as is termed by painters a sash tool, go over the whole, observing carefully to remove any of the size (while it is yet soft) that may lodge on the delicate or sharp places,

and set it aside to dry; when it has become so, take a little very thin oil gold size, and with as much of it as just damps the brush, go over the figure, allowing no more of this size to remain than what causes it to shine. Set it apart in a dry place, free from smoke; and after it has remained there forty-eight hours, the figure is prepared for bronzing.

The bronze, which is almost an impalpable powder, (and may be had at the colour shops of all metallic colours) should be dabbed on with a little cotton wool; after having touched over the whole figure, let it stand another day; then with a soft dry brush rub off all the loose powder, and the figure will resemble the metal it is intended to represent, and possess the quality of resisting the weather.

Improved method of taking off Impressions of Leaves, Plants, &c.

Take half a sheet of fine wove paper, and oil it well with sweet oil; after it has stood a minute or two to let it soak through, rub off the superfluous oil with a piece of paper, and let it hang in the air to dry; after the oil is pretty well dried in, take a lighted candle or lamp, and move the paper slowly over it in an horizontal direction, so as to touch the flame, till it is perfectly black. When you wish to take off impressions of plants, lay your plant carefully on the oiled paper, and lay a piece of clean paper over it, and rub it with your finger equally in all parts for about half a minute; then take up your plant, and be careful not to disturb the order of the leaves, and place it on the book or paper on which you wish to have the impression; then cover it with a piece of blotting-paper, and rub it with your finger for a short time, and you will have an impression superior to the finest engraving. The same piece of black paper will serve to take off a great number of impressions, so that when you have once got through the process of blacking it, you may make an impression in a very short time.

The principal excellence of this method is, that the paper receives the impression of the most minute

veins and hairs; so that you may take the general character of most flowers much superior to any engraving. The impressions may afterwards be coloured according to nature.

Method of Cleaning dirty Prints or Books.

If the print should be pasted upon canvas, put it into a copper or kettle of water just boiling, and in three or four minutes it will easily separate from the canvass; next expose it to the sun, by placing it on a grass platt, and to prevent the wind from having any effect upon it, so as to tear it or blow it away, fix four scewers into the ground near the corners, and tie a string to each of the skewers, crossed from corner to corner, so as to confine it completely; when it becomes dry, wet it again thoroughly; and so on for several days if necessary, in the same manner as you bleach linen; in which operation, as well as in bleaching *prints*, a hot sun is best. If the foulness of the *print* should settle in spots, soak those spots well, by putting wet linen rags doubled upon them for a considerable time. If soaking in this manner does not get the spots out, put the *print* into hot water, gently boiling, or very near it, and let it continue for twenty-four hours; but if the paper be spongy, or very thin, it will not bear soaking so long. Soaking in this manner is seldom necessary. The foulness from flies may be gently brushed off with a wet sponge, when the *print* is thoroughly soaked. Spirit of sea salt much diluted will get white-wash off *prints:* take care not to hold your nose over the vapour of the spirit. Do not leave your prints on the grass-platt at night, for fear of the worms.

To improve Chimney Fire Places, and increase the Heat, by a proper attention to the setting of Stoves, Grates, &c.

The best materials for setting stoves or grates are fire-stone and common bricks and mortar. Both materials are fortunately very cheap. When bricks are used, they should be covered with a thin coating of

plaister, which when it is dry should be white-washed. The fire-stone should likewise be white-washed when that is used; and every part of the fire-place which is not exposed to being soiled and made black by the smoke, should be kept as white and clear as possible. As *white* reflects more heat as well as more light than any other colour, it ought always to be preferred for the inside of a chimney fire-place; and *black*, which reflects neither light nor heat, should be most avoided.

Cheap and excellent Composition for preserving Weather Boarding, Paling, and all other Works liable to be injured by the Weather.

Well burnt lime will soon become slacked by exposure in the open air, or even if confined in a situation not remarkably dry, so as to crumble of itself into powder. This is called air-slacked lime, in contradistinction to that which is slacked in the usual way, by being mixed with water. For the purpose of making the present composition to preserve all sorts of wood work exposed to the vicissitudes of the weather, take three parts of this air-slacked lime, two of wood ashes, and one of fine sand; pass them through a fine sieve, and add as much linseed oil to the composition as will bring it to a proper consistence for working with a painter's brush. As particular care must be taken to mix it perfectly, it should be ground on a stone slab with a proper muller, in the same manner as painters grind their white lead, &c.; but where these conveniences are not at hand, the ingredients may be mixed in a large pan, and well beat up with a wooden spatula. Two coats of this composition being necessary, the first may be rather thin, but the second should be as thick as it can conveniently be worked. This most excellent composition for preserving wood when exposed to the injuries of the weather, is highly preferable to the customary method of laying on tar and ochre.

To make Red Coral Branches for embellishing Grottos, and the method of Building a Grotto at a very little expence.

Dissolve clear rosin in a brass pan; to one ounce

thereof add two drachms of the finest vermillion; and when you have stirred them well together, and have chose your twigs and branches, peeled and dried, take a pencil and paint these twigs all over whilst the composition is warm, and shape them in imitation of natural coral of black thorn: when done, hold it over a gentle coal fire, turn the branches about with your hand, and it will make it all over smooth and even as if polished. In the same manner you may, with white lead prepare white; and with lamp black black coral.

A beautiful grotto may be built at a very little expence with glass cinders, which may easily be had, pebbles, or pieces of large flint, and embellish it with such counterfeit coral, amber, pieces of looking-glass, oyster, muscle, and snail shells, moss, pieces of chalk, ore, &c. The cement to bind them together is as follows:—Take two parts of white rosin, melt it clear, add to it four parts of bees' wax; when mixed together, add stone-flour of the stone you design to cement, two or three parts, or so much as will give the cement the colour of the stone; to this add one part of flour of sulphur. First incorporate all together over a gentle fire, and afterwards knead it with your hands in warm water; with this cement the stones after they are well directed, and have been warmed before the fire, in order to receive the cement the better.

Vulgar Error respecting the putting of Spirits into Boots or Shoes to prevent the Effects of Cold.

The custom of pouring brandy into the boots or shoes when the feet have got wet, with a view to prevent the effects of cold, is a practice which (though very common) is founded in prejudice and misconception, and often proves fatal, by bringing on inflammation and consequent obstruction in the bowels. This practice is adopted upon the supposition that because spirits when swallowed excite an universal warmth, and restore the circulation in the extremities, they must do the same when applied to the ex-

tremities themselves. But the reverse happens. Fluids, when evaporating, produce cold; and the lighter or more spirituous the fluid, the more quickly it evaporates, and the greater is the degree of cold generated. This may be proved by a very simple experiment. If one hand be wetted with spirit and the other with water, and both are held up to dry in the air, the hand wetted with spirit will feel infinitely colder than the other; or if the bulbs of two thermometers be so treated, the mercury will be observed to fall much more rapidly and extensively in the one case than in the other. Whatever danger therefore arises from cold or damp feet, it is generally enhanced by the practice alluded to. If such a remedy is to be at all employed, it ought undoubtedly to be taken into the stomach.

Substitute for Soap, easily prepared in small quantities, by private Families in the Country.

Collect before the time of seeding, thistles, nettles, fern, and such other weeds as usually infest the borders of high roads and hedges, and burn them in a large heap, gradually, till the whole are consumed, and carefully preserve the ashes in a dry place ready to make the ley wanted for the purpose of making a substitute for soap.

The requisite materials and utensils should be prepared, which are but few in number. They consist 1st, Of a small tub of white wood, nine inches in width, and as many in height. This tub should be perforated near the bottom; its use is for mixing the leys. (Were it made of oak it would colour the leys.) 2d, A small copper basin with a round bottom, a foot in diameter, and seven or eight inches in depth; or where this cannot be procured, an iron pot or earthen vessel that can bear the fire, may be used. This vessel is intended for boiling the mixture. 3d, For this small manufacture are finally required a skimmer, a spatula of white wood, and two earthen pans.

The materials necessary are, 1, some good ashes; 2, lime; and 3, oil, tallow, or kitchen fat.

Method of Preparing the Leys.

Take three pounds of ashes and one pound of lime. First, moisten the lime with a small quantity of water, in order to slake it; and after it has completely crumbled down, mix with it the ashes, and put this mixture into the tub, having previously spread a piece of canvas at the bottom; carefully close the hole at the bottom of the tub; after which pour upon the materials a quantity of water sufficient to soak it well through, and rise above it in the vessel, to the height of about three finger breadths. Then stir it well with a stick, and suffer it to stand for some hours; then open the hole in order to let the ley run off, which is collected and kept by itself. This is the first ley. Then again put fresh water in the tub, stir the materials with a stick, let them stand for some hours, and then draw off the second ley, which is also kept separate. The third ley is obtained in the same manner, by pouring fresh water upon the remainder of the ashes, which will now have been sufficiently exhausted of its saline particles.

Take equal quantities of the first ley, and of kitchen fat, tallow, or oil, and melt them together in your copper basin, over a gentle fire, till they are well incorporated, by constantly agitating them with your wooden spatula. When the ley and grease are well united, you may add more ley of the second quality, and digest them for some time with a gentle heat, till the mixture is completed, taking care to stir it well all the time; then pour it into your earthen pans to cool and preserve for use. A few trials will enable you to make it in a perfect manner; and a little of this composition will be found to answer all the purposes of soap for family use. The surplus ley of the stronger kinds may be preserved for future use, and the weaker ley will serve to put upon fresh ashes on a future occasion; or a little of any of these leys will form a useful steep, with a considerable quantity of warm water, for the dirty plain linen intended to be washed, but will be too strong for printed calicos or dyed articles.

To loosen the Glass Stopples of Smelling Bottles and Decanters.

With a feather rub a drop or two of olive oil round the stopple, close to the mouth of the bottle or decanter, which must be then placed before the fire, at the distance of a foot or eighteen inches; in which position the heat will cause the oil to spread downward between the stopple and the neck. When the bottle or decanter has grown warm, gently strike the stopple on one side and on the other, with any light wooden instrument; then try it with the hand. If it will not yet move, place it again before the fire, adding, if you choose, another drop of oil. After a while strike again as before, and by persevering in this process, however tightly the stopple may be fastened in, you will at length succeed in loosening it.

To take Mildew out of Linen.

Take soap, and rub it well; then scrape some fine chalk, and rub that also in the linen; lay it on the grass; as it dries wet it a little, and it will come out at twice doing.

To improve the Down of Geese.

The nature of the food contributes very much to the value of the down, and to the strength of feathers; the particular care taken of geese has no less influence. It has been remarked, that in places where these birds find a great deal of water, they are not so much subject to vermin, and furnish feathers of a better quality.

To prevent Accidents from leaving a Poker in the Fire.

The following invention is equally simple and secure. Immediately above that square part of the poker, by blacksmiths called the bit, let a small cross of iron, about an inch and a half each way, be welded in.

The good consequences of this simple contrivance will be—1st, If the poker, by the fire giving way,

should slip out, it will probably catch on the edge of the fender.

2d, If it should not, it cannot injure the hearth or carpet, as the hot part of the poker will be borne up some inches.

And 3d, The poker cannot be run into the fire further than the bit, which in regard to a polished poker, is also of some consequence.

Wash for preserving Drawings made with a Black Lead Pencil, or with Hard Black Chalk.

A thin wash of isinglass will fix either black lead or hard black chalk, &c. as to prevent their rubbing out; or the same effect may be produced by the simple application of skimmed milk. The best way of using the latter is, to lay the drawing flat upon the surface of the milk: and then, taking it up expeditiously, to hang it by one corner till it drains and dries. The milk must be perfectly free from cream, or it will grease the paper.

To make a Liquid for Staining Bone or Wood of different Colours.

Take strong white wine vinegar in a glass vessel, and put to it filings of copper, with some Roman vitriol, roach allum, and verdigris, and leave it thus infused for seven days; then boil it in some vessel, and by putting into it bone, ivory, or wood, it will penetrate, and give it a green colour. If any other colour is required, as red, blue, or yellow, put Brazil wood, indigo, French berries, or any other such colours, to infuse in the vinegar, with a little roach allum.

To stain Horn to imitate Tortoise Shell.

The horn to be stained must first be pressed into proper plates or scales, or other flat form, the following mixture must then be used.: —

Take of quicklime two parts, of litharge one, and temper them to the consistence of a soft paste with a soap lye. Put this paste over all the parts of the

horn, except such as are proper to be left transparent, in order to the greater resemblance of the tortoise shell. The horn must then remain thus covered with the paste till it be thoroughly dry: when the paste being brushed off, the horn will be found partly opake and partly transparent in the manner of tortoise shell: and when put over a foil, will be scarcely distinguishable from it. It requires some degree of fancy and judgment to dispose of the paste in such a manner as to form a variety of transparent parts, of different magnitude and figure, to look like nature. This may be done by mixing whitening with some of the paste to weaken its operation in particular places, by which spots of a reddish brown will be produced; that if properly interspersed, especially on the edges of the dark parts, will greatly increase as well the beauty of the work as its similitude to the real tortoise shell.

A cheap and simple process for Painting on Glass, sufficient for the purpose of making a Magic Lanthorn.

Take good clear rosin, any quantity, melt it in an iron pot; when melted entirely, let it cool a little, and before it begins to harden, pour in oil of turpentine sufficient to keep it liquid when cold. In order to paint with it, let it be used with colours ground with oil, such as are commonly sold in colour shops.

Distemper in Dogs.

Dr. Blaine has described the disease called the Distemper in Dogs with accuracy, and his medicines in general are successful: but a gentleman had administered Dr. Blaine's medicines to a favorite pointer in the decease called *The Distemper*, but with no avail: the unvarying symptoms had come on, when the poor animal crawled into the field and fell among some grass, attempting, but in vain, to eat it. The gentleman followed this suggestion of nature, and ordered a handful of grass to be cut in shreds of about half an inch long, and when mixed with butter,

to be put down the animal's throat; the dose was repeated three times in every twenty four hours, and a visible amendment almost immediately took place, which terminated in recovery.

Proper Situation for a Green-house or Room.

The aspect of a green-house may be at any point from east to west, following the course of the sun; or it may be a little to the north of east or west; but only a little, and the less the better, otherwise the plants will not generally thrive in it, nor will the flowers acquire their natural colours.

Easy method of discovering whether or not Seeds are sufficiently Ripe.

Seeds when not sufficiently ripe will swim, but when arrived at full maturity, they will be found uniformly to fall to the bottom; a fact that is said to hold equally true of all seeds, from the cocoa nut to the orchis.

Method of growing Flowers and Fruits during Winter.

In order to produce this effect, the trees or shrubs being taken up in the spring, at the time when they are about to bud, with some of their own soil carefully preserved among the roots, must be placed upright in a cellar till Michælmas; when with the addition of fresh earth, they are to be put into proper tubs or vessels, and placed in a stove or hot house, where they must every morning be moistened or refreshed with a solution of half an ounce of sal-ammoniac in a pint of rain water. Thus in the month of February fruits or roses will appear; and with respect to flowers in general, if they are sown in pots at or before Michælmas, and watered in a similar manner, they will blow at Christmas.

To prevent Blossom and Fruit Trees from being damaged by early Spring Frost.

If a rope (a hempen one it is presumed) be inter-

mixed among the branches of a fruit tree in blossom, and the end of it brought down so as to terminate in a bucket of water, and should a slight frost take place in the night time, in that case the tree will not be effected by the frost, but a film of ice of considerable thickness will be formed on the surface of the bucket in which the rope's end is immersed; although it has often happened that another bucket of water, placed beside it for the sake of experiment, has had no ice at all upon it.

Bad effects of Iron Nails, &c. on Fruit Trees, or mischievous effects of Iron Nails in conjunction with Branches of Fruit Trees.

It often happens that some of the limbs of fruit trees, trained against a wall, are blighted and die, while others remain in a healty and flourishing state. This has been hitherto erroneously attributed to the effects of lightening; but from closer observation, and from several experiments, it has been found to arise from the corroding effects of the rust of the nails and cramps with which trees in this situation are fastened. To avoid this inconvenience therefore, it requires only to be careful in preventing the iron from coming in contact with the bark of the trees.

A method of curing Fruit Trees infected with an Easterly Blight.

Where valuable fruit trees are infected with this blight, they may with little trouble and expence be in a short time cured, by fumigating them with brimstone strewed on light charcoal; this effectually kills them; but the workman must observe to get to windward of the trees, as the fumes both of brimstone and charcoal are very offensive and pernicious.

Mr. Miller recommends washing and sprinkling the blighted tress from time to time with common water, (that is, such as hath not had any thing steeped in it,) and the sooner that is performed, whenever we apprehend danger, the better; and if the young and tender shoots seem to be much infected, wash

them with a woollen cloth so as to clear them, if possible, from all glutinous matter that their respiration and perspiration may not be obstructed; and if some broad flat pans or tubs are placed near the trees, it will keep their tender parts in a ductile state, and greatly keep them; but whenever this operation of washing the trees is performed, it should be early in the day, that the moisture may be exhaled before the cold of the night comes on, especially if the nights are frosty; nor should it be done when the sun shines very hot upon the wall, which would be subject to scorch up the tender blossom.

To Prune Wall Fruit.

Cut off all fresh shoots, however fair they may appear to the eye, that will not without much bending be well placed to the wall; for if any branch happen to be twisted or bruised in the bending or turning (which you may not easily perceive), although it may grow and prosper for the present, yet it will decay in time, and the sap or gum will issue from that place.

New method of raising Cucumbers.

From the best seed that can be got from the common prickly cucumber, raise plants on a moderate hot-bed, not hurrying them too much in their growth. In May, when the danger of the frost is nearly over, familiarise the plants by degrees to the air, and towards the latter end of the month plant them in the open ground against a south wall. Take care not to give them too much water, as that will injure the fruit. When they have run up about five feet, they will send forth blossoms, and the fruit will begin to shew itself soon after. The flesh of cucumbers raised in this manner will be thicker and firmer, and the flavour vastly more delicious than those raised from the same seed, but planted in the ordinary way, and the runners suffered to trail on the ground. Though a south wall in most gardens is too much appropriated to other things, to give room for cucumbers in general, yet in every garden a few plants

may be so trained by way of rarity, and to save seed, which is found to be greatly improved by this method, so as to produce much better cucumbers in the common way of raising them. One or two plants so raised, will supply a sufficient quantity of seed for a large garden.

Laying a cucumber or melon bed with tiles, is also of particular service in improving the fruit, and giving it a proper flavour.

To obtain a good crop of Onions.

In order to obtain a good crop of onions, it is proper to sow at different seasons, viz. in light soils, in August, January, or early in February; and in heavy wet soils, in March, or early in April. Onions, however, should not be sown in January, unless the ground be in a dry state, which is not often the case at so early a period of the season; but if so, advantage should be taken of it.

Method of cultivating Radishes for Salad, so as to have them ready at all Seasons of the Year.

Take seeds of the common radish, and lay them in rain water to steep for twenty-four hours; then put them quite wet into a small linen bag, well tied at the mouth with packthread. If you have steeped a large quantity of seeds, you may divide them into several bags. Then expose the bags in a place where they will receive the greatest heat of the sun, for about twenty-four hours, at the end of which time the seed will begin to grow, and you may then sow it in the usual manner, in earth well exposed to the heat of the sun. Prepare two small tubs to cover each other exactly. These may be easily provided, by sawing a small cask through the middle, and they will serve in winter; in summer one will be sufficient for each kind of earth that has been sown. As soon as you have sown your seeds you must cover them with your tub, and at the end of three days you will find radishes of the size and thickness of young lettuces, having at their extremities two small round

leaves, rising from the earth, of a reddish colour. These radishes cut or pulled up will be excellent if mixed with salad, and they have a much more delicate taste than the common radishes which are eaten with salt.

By taking the following precautions you may have them in winter, and even during the hardest frosts: After having steeped the seeds in warm water, and exposed them to the sun as already directed, or in a place sufficiently hot to make them shoot forth, warm the two tubs; fill one of them with earth well dunged; sow your seeds thus prepared in one of them, and cover it with the other tub; you must then be careful to sprinkle it with warm water as often as may be necessary. Then carry the two tubs closely joined, taking care they cover each other, into a warm vault or cellar, and at the end of fifteen days you may gather a fine salad.

Cautions in visiting Sick Rooms.

Never venture into a sick room if you are in a violent perspiration, (if circumstances require your continuance there for any time,) for the moment your body becomes cold, it is in a state likely to absord the infection, and give you the disease. Nor visit a sick person (especially if the complaint be of a contagious nature) with an empty stomach, as this disposes the system more readily to receive the contagion. In attending a sick person place yourself where the air passes from the door or window to the bed of the diseased, not betwixt the diseased person and any fire that is in the room, as the heat of the fire will draw the infectious vapour in that direction, and you would run much danger from breathing in it.

To promote Sleep.

No fire, candle, rush-light, or lamp, should be kept burning during the night in a bed room, for it not only vitiates the air in a very considerable degree, but also disturbs and prevents the rest of those whose sleep is uneasy, particularly the aged. In a dark

apartment sleep generally comes on without much invitation; whereas any light in the apartment stimulates the brain, and consequently the whole nervous system, and dispels any tendency to repose.

General Rules for the choice of Spectacles, and for the Preservation of the Sight.

[*From Mr. Adams's Essay on Vision.*]

The most general and perhaps the best rule that can be given to those who are in want of assistance from glasses, in order so to choose their spectacles that they may suit the state of their eyes, is to prefer those which shew objects nearest their natural state, neither enlarged nor diminished, the glasses being near the eye, and that give a blackness and distinctness to the letters of a book, neither straining the eye nor causing any unnatural exertion of the pupil. For no spectacles can be said to be properly accommodated to the eyes which do not procure them ease and rest; if they fatigue the eyes, we may safely conclude either that we have no occasion for them, or that they are ill made, or not proportioned to our sight.

Though in the choice of spectacles, every one must finally determine for himself, which are the glasses through which he obtains the most distinct vision; yet some confidence should be placed in the judgment of the artists of whom they are purchased, and some attention paid to his directions. By trying many spectacles, the eye is fatigued as the pupil varies in size with every different glass, and the eye endeavours to accommodate itself to every change that is produced. Hence the purchaser often fixes upon a pair of spectacles not the best adapted to his sight, but those which seem to relieve him most, while his eyes are in a forced and unnatural state, and consequently when he gets home, and they are returned to their natural state, he finds what he has chosen fatiguing and injurious to the sight.

Comfort for those nearly Blind.

Inscriptions on dark blue glazed paper, written with white ink, have been found very legible by persons afflicted with bad eyes, who have had many things written in a strong plain hand for that purpose. The ink is made with gum water and flake white, finely powdered; it must be often shaken, even whilst you are writing, as the flake white very soon subsides. A common pen will do very well for the writing. A bright yellow or dark green paper is likewise very easily read.

To prevent the Mischief arising from the Bite of a Mad Dog.

Where the excision of the part bitten can be immediately performed, it is the best preventive of danger; or where the part can be burnt out by the application of a red hot iron, little danger is likely to happen. Nothing else is at all to be depended on.

Cure for the Poison of the Deadly Night-Shade.

Give the patient an emetic as soon as possible; then let him drink vinegar or lemon juice, about a pint diluted in an equal quantity of water, in the course of the day, and let him walk about to prevent sleep, which would most certainly prove fatal.

Tooth Powder.

To one ounce of fine powder of bark, and one ounce of gum myrrh, add three fourths of an ounce of bole armenick; mix these ingredients well together and they will produce an excellent tooth powder, valuable in itself, and highly approved of by many gentlemen of the faculty.

Efficacy of Vinegar in curing Burns and Scalds.

The application of vinegar to burns and scalds is to be strongly recommended. It possesses active powers, and is a great antiseptic and corrector of putrescence and mortification. The progressive ten-

dency of burns of the unfavorable kind, or ill treated, is to putrescence and mortification. Where the outward skin is not broken, it may be freely used every hour or two; where the skin is broken, and if it gives pain, it must be gently used. But equal parts of vinegar and water, in a cold state, used freely every three or four hours, are generally the best application, and the best rule to be directed by.

House-leek, either applied by itself or mixed with cream, gives present relief in burns, and other external inflammations.

To kill Earwigs or other Insects which may accidentally have crept into the Ear.

Let the person under this distressing circumstance lay his head upon a table, the side upwards that is afflicted; at the same time let some friend carefully drop into the ear a little sweet oil, or oil of almonds. A drop or two will be sufficient, which will instantly destroy the insect, and remove the pain however violent.

To prevent Corns from growing on the Feet.

Easy shoes; frequently bathing the feet in lukewarm water, with a little salt or pot-ashes dissolved in it.

The corn itself will be completely destroyed by rubbing it daily with a little caustic solution of pot ash, till a soft and flexible skin is formed.

Certain Cure for the Cramp.

An effectual preventive for the cramp in the calves of the legs, which is a most grievous pain, is to stretch out the heel of the leg as far as possible, at the same time drawing up the toes towards the body. This will frequently stop a fit of the cramp after it has commenced; and a person will, after a few times, be able, in general, to prevent the fit coming on, though its approach be between sleeping and waking. Persons subject to this complaint should have a board fixed to the bottom of the bed, against which the foot should be pressed when the pain commences.

To alleviate the Pain occasioned by the Sting of Gnats.

The disagreeable itching occasioned by the sting of these insects may be removed by volatile alkali, or immediately rubbing and washing the part affected with cold water.

At night, to rub with fullers earth and water lessens the inflammation.

To cure the Sting of a Wasp or Bee.

To the part affected apply oil of tartar or solution of potash, and it will give instant ease; as also well bruised mallows.

Remedy for a Sore Throat.

Take rosemary tops about a handful, put them into a bason and pour a pint of boiling hot verjuice upon it; then cover it over with a tin funnel the broad side downwards, and the steam will come through the nozzle of the funnel; then hold your mouth over the steam till it has gone down your throat.

N. B. Be very careful that you do not put your mouth too close to the funnel, as it may scald it; but let the steam go down your throat as much as possible; and repeat it as often as necessary.

A Receipt for a Cough.

Take a glass of spring water and put into it a spoonful of the syrup of horehound, and mix with it nine or ten drops of the spirit of sulphur.

To make an improved Tincture of Bark.

Red bark grossly powdered one ounce, of snake root in powder six drachms, saffron one drachm and a half, cochineal ten grains, orange peel one ounce and a half. Steep the above articles in one pint of the best brandy, and you will have a tincture equally good as the famous Dr. Huxham's.

To make Indian Ink.

Put six lighted wicks into a dish of oil; hang an iron or tin concave cover over it so as to receive all the smoke; when there is a sufficient quantity of soot settled to the cover, then take it off gently with a feather upon a sheet of paper, and mix it up with gum tragacanth to a proper consistence.

N. B. The clearest oil makes the finest soot, consequently the best ink.

Permanent Writing Ink.

As common writing ink is susceptible of being effaced by oxygenated muriatic acid, and as the knowledge of this fact may be abused to very fraudulent purposes, the following composition for inks, absolutely indestructable, is recommended to the notice of the curious.

Boil one ounce of Brazil wood and three ounces of nut galls in forty six ounces of water, till they shall be reduced to thirty ounces in all. Pour this decoction while it is yet hot upon half an ounce of sulphate of iron, or martial vitriol, a quarter of an ounce of gum arabic, and a quarter of an ounce of white sugar. After these substances are dissolved, add to the solution one ounce and a quarter of indigo finely pulverized, with three quarters of an ounce of lamp black, very pure of smoke black, previously diluted in one ounce of the best brandy.

The following receipt is still more simple:—Boil one ounce of Brazil wood with twelve ounces of water and half an ounce of alum; continue the ebullition till the liquid mixture shall have been reduced to eight ounces; then add an ounce of the black oxyde of manganese, which has been reduced by decantation to extreme fineness, and in mixture with it, half an ounce of gum arabic.

To take off instantly a copy from a Print or Picture.

Make a water of soap and alum, with which wet a cloth or paper; lay it either on a print or picture,

and pass it once under the rolling press, then going round the other side to take it up, you will have a very fine copy of whatever you shall have laid it upon.

To make Mezzotintos.

Mezzotintos are made in the following manner:—Take a well polished copper plate, and beginning at the corner, rake or furrow the surface all over with a knife or instrument made for the purpose, first one way and then the other, till the whole is of a regular roughness, without the least smooth part to be seen; in which state, if a paper was to be worked from it at the copper plate press, it would be all over black. When this is done the plate is rubbed over with charcoal or black lead, and then the design is drawn with white chalk; after which the outlines are traced out, and the plate finished by scraping off the roughness, so as to leave the figure on the plate. The outlines and deepest shades are not scraped at all, the next shades are scraped but little, the next more, and so on, till the shades gradually falling off leave the paper white, in which places the plate is neatly burnished.

Lavender Water.

Put two pounds of lavender pips into two quarts of water, put them into a cold still, and make a slow fire under it; distil it off very slowly, and put it into a pot till you have distilled all your water: then clean your still well out, put your lavender water into it, and distil it off slowly again; put it into bottles and cork it well.

To make Rose Water.

Gather roses on a dry day when they are full blown; pick off the leaves, and to a peck put a quart of water; then put them into a cold still, make a slow fire under it, the slower you distil it the better it will be; then bottle it, and in two or three days you may cork it.

Genuine Windsor Soap.

To make this famous soap for washing the hands, shaving, &c. nothing more is neeessary than to slice the best white soap as thin as possible, melt it in a new stew pan over a slow fire, scent it well with oil of carraway, and then pour it into a frame or mould made for that purpose, or a small drawer, adapted in size and form to the quantity. When it has stood three or four days in a dry situation, cut into square pieces and it is ready for use. By this simple mode, substituting any more favourite scent for that of carraway, all persons may suit themselves with a good perfumed soap at the most trifling expence. Shaving boxes may be at once filled with the melted soap, instead of a mould.

To increase the Growth of Hair.

Hartshorn beat small and mixed with oil being rubbed upon the head of persons who have lost their hair, will cause it to grow again as at first.

To destroy Rats and other Vermin.

Sponge, if cut in small pieces, fried or dipped in honey and given to vermin, distends their intestines, and effectually destroys them. The addition of a little oil of rhodium will tempt them to eat.

A better method would be to feed them regularly two or three weeks in any apartment which they infest. The hole by which they enter being first fitted with a sliding door, to which a long string may be added; any apartment might thus be turned into a gigantic rat trap.

Dr. Taylor's cheap and efficacious method of destroying Rats.

[Communicated to the Manchester Agricultural Society.]

In or near the place frequented by these vermin, place on a slate or tile one or two table spoonfuls of dry oatmeal. Lay it thin and press it flat, more

easily to ascertain what is taken away. As the rats, if not interrupted, will come regularly there to feed, continue to supply them with fresh oatmeal for two or three days; and then well mixing in about six table spoonfuls of dry oatmeal three drops only of oil of anniseeds, feed them with this for two or three days more. Afterward, for one day, give them only half the quantity of this scented oatmeal which they have before actually eaten, and next day place the following mixture:—To four ounces of dry oatmeal scented with six drops of oil of anniseeds, add half an ounce of carbonated barytes, previously pounded very fine in a mortar, and sifted through a little fine muslin or cambric. Mix this intimately with the scented oatmeal, and laying it on the tile or slate, allow the rats to eat it, without the smallest interruption, for twenty four hours. A few hours after eating any of it, they will frequently be seen running about, as if drunk, or paralytic; but they generally, at last, retire to their haunts and die. As rats are extremely sagacious, it may be proper when they have during the twenty-four hours eaten only a small portion, to leave the remainder of the mixture twenty-four hours longer; after which it will be best to burn what is left, a fresh mixture being prepared at so trifling an expence when wanted. The doors of the place where this mixture is exposed to the rats, should be kept closed; as well to prevent their being disturbed, as to obviate the possibility of accidents to children or domestic animals; for though it be not so extremely dangerous as the preparations commonly employed for killing rats, and is even used in medicine, it proves fatal if improperly taken, unless timely counteracted by emetics. The oil of anniseeds though it renders the mixture disagreeable to dogs, and many other animals, is alluring when used in small quantities to rats. The carbonated barytes, Dr. Taylor adds, may be procured in large quantities at the lead mines belonging to Sir Frank Standish, Bart. at Anglezark, near Chorley, in Lancashire. The proper sort is tasteless, semi-transparent, and effervesces with acids; it is moderately hard, and

striated. It is called aërated barytes—terra ponderosa aërata—and sometimes by the miners ponderous spar. It may be purchased at a cheap rate from Messrs, Brown and Mawe, in Tavistock Street, or other collectors of minerals.

To make Portable Balls, for removing Spots from Clothes in general.

Take fullers' earth perfectly dried so that it crumbles into powder, moisten it with the clear juice of lemons, and add a small quantity of pure pearl ashes; then work and knead the whole carefully together, till it acquires the consistence of a thick elastic paste; form it into convenient small balls, and expose them to the heat of the sun, in which they ought to be completely dried. In this state they are fit for use in the manner following:—First, moisten the spot on your clothes with water, then rub it with the ball just described, and suffer it again to dry in the sun: after having washed the spot with pure water, it will entirely disappear.

To take Spots effectually out of Silk, Linen, or Woollen.

Spirits of turpentine twelve drops, and the same quantity of spirits of wine; grind these with an ounce of pipe-maker's clay, and rub the spots therewith. You are to wet the composition when you do either silk, linen, or woollen with it; let it remain till dry, then rub it off, and the spot or spots will disappear.

True spirits of salts diluted with water will remove iron-mould from linen; and sal-ammoniac with lime will take out the stains of wine.

Easy and safe method of discharging Grease Spots from Woollen Cloths.

Fullers'-earth, or tobacco-pipe clay, being put wet on an oil spot, absorbs the oil as the water evaporates, and leaves the vegetable or animal fibres of cloth clean, on being beaten or brushed out. When the spot is occasioned by tallow or wax, it is necessary

to heat the part cautiously by an iron or the fire, while the cloth is drying. In some kinds of goods, blotting paper, bran, or raw starch may be used with advantage.

To take out Spots on Silk.

Rub the spots with spirit of turpentine ; this spirit exhaling, carries off with it the oil that causes the spot.

To take Iron-mould out of Linen.

Hold the iron mould on the cover of a tankard of boiling water, and rub on the spot a little juice of sorrel and a little salt, and when the cloth has thoroughly imbibed the juice, wash it in lee.

To take Spots out of Cloths, Stuffs, Silk, Cotton, and Linen.

Take two quarts of spring water, put in it a little fine white pot-ash, about the quantity of a walnut, and a lemon cut in slices ; mix these well together, and let it stand for twenty-four hours in the sun ; then strain it off, and put the clear liquid up for use. This water takes out all spots, whether pitch, grease, or oil, as well in hats, as cloths and stuffs, silk or cotton, and linen. As soon as the spot is taken out, wash the place with fair water ; for cloths of a deep colour, add to a spoonful of the mixture as much fair water as to weaken it.

Grease spots in cloth may be removed by using soap and water with a tooth or nail brush, and afterwards wiping off the lather with the wet corner of a towel. Essence of lemon, or pure spirit of turpentine will remove pitch from cloth, &c.

In woollen cloth an easier method is to scrape off the hard tallow with the edge of a tea spoon, then rub the part briskly with a clean woollen rag, shifting the rag as the part becomes dirty ; or place some blotting paper on the spot, press it with a hot iron, occasionally moving the paper.

Mr. Forsyth's Method of Curing Injuries and Defects in Fruit and Forest Trees, published by command of his present Majesty.

Mr. Forsyth directs, in his Treatise on the Management and Culture of Fruit Trees, &c. that all the decayed, hollow, loose, rotten, injured, diseased, and dead parts, should be entirely cut away, till the knife extend to the sound or solid wood, so as to leave the surface perfectly smooth. The composition which he has invented, and directed to be then applied, is thus prepared:—To twenty-five gallons of human urine, and a peck of lime, add a sufficient quantity of fresh cow dung to bring it to the consistency of paint. This composition should then be laid on with a painter's brush, to the thickness of about an eighth of an inch, and the edges finished off as thin as possible. In the mean time, a tin box, the top of which is perforated with holes, should be filled with a mixture of five parts of dry pulverized wood ashes, and one part bone ashes also reduced to powder; from which it is to be scattered or dredged over the surface of the composition; and when it has been suffered to absord half an hour, an additional portion of the powder is to be gently applied with the hand, till the plaister acquire a smooth and even surface. As the edges of the plaistered wounds grow up, care must be taken to prevent the new wood from coming in contact with that which is decayed; and for this purpose it will be proper to cut out the latter, in proportion as the growth of the former advances; a hollow space being left between the two, that the new wood may have sufficient space to extend and fill up the cavity, thus forming as it were a new tree. In consequence of this process, old and decayed pear trees, in the second summer after its being thus applied, are said to have produced fruit of the best quality and finest flavour; and in the course of four or five years to have yielded such abundant crops, as young and healthy trees could not have borne in twenty years. By the same method too, large and aged elm-trees, all the parts of which were broken,

having only a very small portion of bark left on the trunk, shot forth stems from their tops to the height of more than thirty feet, within six or seven years after the composition had been applied. It appears therefore, that both forest and fruit trees, however aged or decayed, may be preserved, and even renovated; while the latter in particular are rendered more fruitful than at any earlier period of their growth. The health and vegetation of trees in general, Mr. Forsyth remarks, may be greatly promoted by scraping them, by cutting away the cankered parts, and by washing their stems annually in February or March: and he recommends fresh soap suds, and the composition, to be applied to the stems and branches of fruit, forest, or timber trees of any kind, in the same manner as the ceiling of rooms are white washed: which he asserts will not only destroy the eggs of insects that would be hatched during the spring and summer, but also prevent the growth of moss. If therefore, he adds, the same operation be repeated in autumn after the fall of the leaf, it will kill the eggs of those numerous insects which would otherwise be hatched during that season and the ensuing winter. So that this process in fact, not only contributes to the nourishment of the tree, but actually preserves its bark in a fine healthful state.

For destroying Bugs and Worms in Wood.

An eminent physician has discovered that by rubbing wood with a solution of vitriol, insects and bugs are prevented from harbouring therein. When the strength of this remedy is required to be increased, there need only be boiled some coloquintida apples in water, in which, afterwards, vitriol is dissolved, and the bedstead, with the wood about them and the wainscoting being anointed with the liquor, will be ever after clear of worms or bugs. The wall may be likewise rubbed with the composition, and some of it may be dropped into the holes where these insects are suspected to be harboured. As to the walls, they require only to be washed over with the vitriol water.

For destroying Caterpillars on Gooseberry Bushes.

Take one Scots pint (two English quarts) of tobacco liquor, which may be made where it cannot be purchased, by infusing any kind of tobacco in water till all the strength be extracted) which the manufacturers of tobacco generally sell for destroying bugs, and mix them with about one ounce of alum; and when the alum is sufficiently dissolved, put this mixture into a plate or other vessel, wide and long enough to admit of a brush, like a weaver's brush, being dipped into it; and as early in the season as you can perceive the leaves of the bushes to be in the least eaten, or the eggs upon the leaves (which generally happens about the end of May) and which will be found in great numbers on the veins of the leaves on their under side; you are then to take the preparation, or liquor, and after dipping the brush into it, and holding the brush towards the under side of the bush, which is to be raised and supported by the hands of another person; and by drawing your hand gently over the hairs of the brush, the above liquid is sprinkled, and falls in small drops on the leaves; the consequence of which is, if the eggs are there, they never come forward; and if they have already generated worms, in a minute or two after the liquor touches them, they either die or sicken, so as to fall of the bush; at least they do so by giving it a little shake. If upon their thus falling off they shall not appear completely dead, the bush should be held up, and either a little boiling water from a watering pot thrown over them, or a bruise given them by a spade or shovel, or the earth where they lie turned over with a hoe. This preparation does not in the least injure the bushes.

To destroy Earwigs and Wood Lice.

A very simple way of ensnaring them and by which they may be taken alive in great quantities, is to place four inch cuts of reeds, bean halm, or strong wheat straw, among the branches, and also lay a number on the ground, at the bottom of the wall. In these

the insects take refuge at day-break, as they depredate chiefly in the night; and any time through the day they may be blown into a bottle with a little water in it, and so be drowned. Or a cheaper way is to burn the straw, and scatter fresh on the ground.

To destroy Fleas on Dogs.

Rub the animal when out of the house with common Scotch snuff, except the nose and eyes. Rub the powder well into the roots of the hair, Clear lime water destroys the whitish flea worm without injuring the skin or hair. Oil of turpentine will likewise do so; but if there be any manginess, or the skin be broken, it will give the animal much pain.

To prevent Slugs from getting into Fruit Trees.

If the trees are standards, tie a course horse hair rope about them, two or three feet from the ground. If they are against the wall, nail a narrow slip of coarse horse hair cloth against the wall, about half a foot from the ground, and they will never get over it, for if they attempt it it will kill them, as their bellies are soft, and the horse hair will wound them.

To destroy Snails.

Snails are great enemies to wall fruit, and in a dewy morning you may easily find where they most delight to breed; but the best way is to find out their haunts in a hard winter, and then destroy them: they lie much in holes of walls, under thorns, behind old trees, or old and close edges.—If you pluck not the fruit they have begun to devour, but let it alone, they will finish their repast on this before they begin another.

To destroy Insects on Wall Fruit Trees.

Take an old tin watering pan, or any similar vessel, and make a charcoal fire in it; add a tube or pipe, made of either tin, leather, or stiff paper, to the spout, which may be of any sufficient length; then strew some brimstone, tobacco dust, fine shreds of

leather, &c. upon the fire in the pan, and cover the top; having a pair of bellows ready, hold the wind-flap over the tube or pipe to receive the smoke, which it will do very effectually when you use the bellows. By this means the suffocating vapour may be directed through the bellows to any part of the tree with the greatest ease and facility, and the tree soon cleared of all vermin. This method is much more effectual than the old one, where a chafing-dish has been recommended for this purpose, because the latter method is more troublesome, and requires the wind to blow from a particular quarter right against the trees, which can seldom be obtained.

Method of destroying Wasps and Hornets.

Those that are not unacquainted with natural history, know that all the working wasps die every autumn when the cold weather comes on, and that only a few females survive the winter and keep up the breed. These, which are turgid with eggs and much larger than the workers, come forth about April from their lurking holes, and being singly each its nest, which in a moderate time becomes very populous.

It is therefore of great consequence to kill as many of these as possible, since a whole swarm is destroyed in every single female early in the year. The places to find them are at new posts, pales, melon frames, or any solid timber; for as they make their combs with the shavings of the sound wood, which they rasp off with their fangs, and moisten up with a certain mucus that nature has provided in their bodies, they will readily be found near such materials.

Hornets must be searched for on decayed posts, rails, &c. for they make their combs with touchwood, and the same kind of natural cement.

In the very hot summer of 1762, wasps were so numerous and alert, that it looked as if no fruit could have hung till it was fit for the table. They began on the grapes before they were half ripe; and getting into the melon frames, scooped out all the pulp of the fruit, leaving only empty shells. I tried phials,

as usual, filled with sugared beer, &c. this destroyed some, but did not seem to lessen their swarms; at last I bethought myself to buy some birdlime, with which I tipped several taper hazel rods of different lengths, and so began catching them by hand, applying the top of the rod as they settled on the fruit. This appeared at first to be a tedious method; but after a little practice it soon had the desired effect, for a handy person or two would in a few hours entangle four or five hundred; and it soon appeared they were not so numerous as we imagined; and the taking the workers starved the grubs, which are supported by them, and prevented a succession. By this simple method, ineffectual as it may appear, I saved my fruit entire, which hung till it was ripened to great perfection.

Hornets, as they are larger and more sluggish, are easily taken: this method of touching them is a sort of angling, and not a bad amusement for half an hour. As fast as they are caught they must be squeezed to death with a flat piece of lath, the tip of the rod refreshed with birdlime now and then. The reason of providing rods of different lengths, is to suit the different heights of the wall.

While I am speaking of fruit it may not be amiss to add, that this summer I recovered a peach tree that was quite shrivelled up on one side, by a partial watering two or three times a week of the affected part.

To destroy Worms in Gravel Walks, &c.

Pour into the holes a ley made of wood ashes and lime: this will also destroy insects if trees are sprinkled with it. Salt and water will do as well.

To make British Champagne.

Take gooseberries before they grow ripe, crush them with a mallet in a wooden bowl, and to every gallon of fruit put a gallon of water; let it stand two days, stirring it well; squeeze the mixture well with your hands through a hop sieve; then measure your

liquor, and to every gallon put three pounds and a half of loaf sugar; mix it well in the tub, and let it stand one day: put a bottle of the best brandy in the cask; leave the cask open five or six weeks, taking off the scum as it rises; then make it up, and let it stand one year in the barrel before bottled.

N. B. One pint of brandy is put to seven gallons of liquor.

Orange Wine.

Take the expressed juice of eight *Seville* oranges, and having one gallon of water wherein three pounds of sugar have been boiled, boil the water and sugar for twenty minutes; skim constantly, and when cooled to a proper heat for fermentation, add the juice, and the outer rind of the juice *(fruit)* shaved off. Put all into a barrel, stir it frequently for two or three days, and then closely bung it for six months before it is bottled.

To preserve Letters from being Opened.

Various ways have been contrived to open letters sealed with wafers only, but the following composition is perfectly secure:—Take fine powder of beanflour, add thereto white of egg well whisked to a fine liquid; make a paste from this mixture, of which put a little under the sealing place; then close the two papers, and hold the part close to the steam arising from the spout of a tea kettle or tea pot of boiling water, which will harden the cement so that it cannot be opened without tearing.

Method of recovering the Legibility of Decayed Writings.

The best method of restoring legibility to decayed writings, is found upon experiment to be by covering the letters with phlogisticated alkali, with the addition of a diluted mineral acid; upon the application of which the letters will change very speedily to a deep blue colour, of great beauty and intensity. A solution of prussiate of potash will also cause the

letters to appear blue. To prevent the spreading of the colour, which by blotting the parchment detracts greatly from the legibility, the alkali should be put on first, and the diluted acid added upon it. The method found to answer best, has been to spread the alkali thin with a feather over the traces of the letters, and then to touch it gently, as near upon or over the letters as can be done with the diluted acid, by means of a feather or bit of stick cut to a blunt point. Though the alkali should occasion no sensible change of colour, yet the moment the acid comes upon it, every trace of a letter turns at once to a fine blue, which soon acquires its full intensity, and is beyond comparison stronger than the colour of the original trace had been. If then the corner of a bit of blotting paper be carefully and dexterously applied near the letters, so as to imbibe the superfluous liquor, the staining of the parchment may be in a great measure avoided; for it is this superfluous liquor which absorbing part of the colouring matter from the letters, becomes a dye to whatever it touches. Care must be taken not to bring the blotting paper in contact with the letters, because the colouring matter is soft whilst wet, and may easily be rubbed off. The acid chiefly employed has been the marine, but both the vitriolic and nitrous succeed very well. They should be so far diluted as not to be in danger of corroding the parchment; after which the degree of strength does not seem to be a matter of much nicety.

To make Pounce.

Gum-sandarac powdered and sifted very fine, will produce an excellent preventive to keep ink from sinking in the paper, after you have had occasion to scratch out any part of the writing.

To make excellent Ink.

Take a pound of the best Aleppo galls, half a pound of copperas, a quarter of a pound of gum arabic, and a quarter of a pound of white sugar candy. Bruise

the galls, and beat the other ingredients fine, and infuse them all in three quarts of white wine, or rain water. Let this mixture stand hot by the fire three or four days, and then put it on a slow fire so as to boil. Stir it frequently, and let it stand five or six hours, till one quarter of it be evaporated. When cold, strain it through a clean coarse piece of linen; bottle and keep it for use.

The communicator of this good old receipt is convinced that much pains have been taken to ascertain the due proportions of the galls and copperas; for he has found that on diminishing or increasing their relative quantities as above, the ink has always been pale; but this defect will sometimes happen if the materials be not of the best kind. The quality of the paper written on will also make a difference in the colour of the ink.

The grand secret in preparing this ink, which will never change its colour if properly attended to, tho' kept never so long, consists in the keeping it free from that mouldiness, which in hot weather particularly, is apt to form upon the surface. The best way is to put it into a large glass bottle with a ground stopper, and to shake it frequently. If from sudden heat of the weather or neglect in shaking the mouldiness should appear, either take it off, if in a very small quantity and easily removed, or otherwise let it accumulate till a thick crust be formed, and then with a piece of wood, or wire crooked at the end, take it off all at once. It is very usual to put ink into an earthen or stone jar, which is suspended to some door that is frequently opened, in order that the ink may be shaken. But few doors are either regularly or sufficiently agitated for the purpose of preventing the formation of the destructive vegetable substance or mouldiness; and this being once accumulated, and of course not seen in the jar, is shaken together with the ink, and the whole is spoiled. You might just as well put a quantity of rotten mushrooms into a bottle of ink and expect that it should retain its virtue. It has been found that the bruised or powdered materials of this receipt for making ink, if

infused in cold water and well strained, will answer the purpose, where it is difficult or inconvenient to heat them as before directed. If the ink be required to be more black and glossy than usual, increase with discretion the quantities of gum and sugar candy; but too much of them will make the ink sticky, and which should not be used where the writing is made in any folding book.

To try the Purity of Spirits.

See if the liquor will burn away without leaving any moisture behind. As spirit is much lighter than water, place a hollow ivory ball in it; the deeper the ball sinks, the lighter the liquor, and consequently more spirituous.

To make Phosphorus.

Two third parts of quicklime (i.e. calcined oyster shells) and one third of flour of brimstone, put into a crucible for an hour, and exposed to the air for an hour, become phosphorus.

To make the Phosphoric Match Bottle.

These bottles may be prepared by mixing one part of flour of sulphur with eight of phosphorus. This requires caution, and should afterwards be handled with great care, lest any part of the mixture get under the finger nails, a small portion of which might occasion great inconvenience. When used to procure a light, a very minute quantity is taken out of the bottle on the point of a match, and rubbed upon cork or wood, which produces an immediate flame.

To Stain Wood a fine Black.

Drop a little oil of vitriol into a small quantity of water, rub the same on your wood, then hold it to the fire until it becomes a fine black, and when polished it will be exceedingly beautiful.

To Stain Wood a beautiful Red or Mahogany colour.

Place a square piece of plane tree wood, a line in

thickness, into pounded dragon's blood, from the Canaries, mixed with oil of turpentine, over the fire, in a glass vessel; the wood will slowly assume the colour, even before the spirit has volatilised. After more than an hour, take the vessel from the fire and let it stand the whole night, when the wood will appear as mahogany colour, not merely on the surface, but also in the interior parts. The denser fibres will be somewhat less coloured; but this instead of injuring the beauty of the wood will rather add to it. The red dye can be made stronger or weaker, by taking a greater or less quantity of Dragon's blood, and by a greater or less degree of digestion and boiling. The wood of the plane-tree is best for this purpose, because it can be easily sawn and polished, because it has a white colour, is neither too hard nor too soft, has beautiful white spots with veins that cross each other, and because artists who make inlaid works have long attempted to colour it by staining. The wood when stained can very easily be freed from the dragon's blood adhering to it, by means of rectified spirits of wine. The spirit of turpentine makes the wood more compact, and renders it more susceptible of a fine polish.

Substitute for Galls in Dyeing, and also in making Ink.

The excrescences on the roots of young oaks may be used with advantage as a substitute for galls. Oak dust has been used in this country instead of galls to produce a black dye; so also has a strong decoction of logwood, copperas, and gum Arabic.

Easy method of Dyeing Yellow or Green.

The plant called weld or dyer's weed, affords a most beautiful yellow dye for cotton, woollen, mohair, silk, and linen, and is that which is most commonly used by dyers for that purpose, as it gives the brightest dye. Blue cloths dipped in a decoction of it become green. The yellow colour of the paint called Dutch pink is got from this plant; the ting-

ing quality resides in the stems and branches, and i
is cultivated in sandy soils, because rich soils are ap
to lessen its value, by making the stalk hollow.

To take Impressions on Paper from Designs made o
Stone.

The stone should be close grained, and the draw
ing or writing should be made with a pen dipped i
ink formed of a solution of lac, in leys of pure soda
to which should be added some soap and lamp-blac
for colouring; leave it to harden for a few days, the
take impressions in the following manner:—Dip th
surface in water, then dab it with printer's ink an
printer's balls; the ink sticks to the design and no
to the stone, and the impression may be taken wit
wet paper by means of a rolling or screw press, i
the ordinary manner. Several hundred copies ma
be taken from the same design in this simple manne

Transparent Paper.

Wet some fine paper with a feather on both side
with a thin layer of rosin dissolved in spirits of wine
It will then serve to put over any thing you wish t
take off.

FINIS.